

***Lower Silver Creek Site Summary***

  
1079765 - R8 SDMS

Name of Site: Lower Silver Creek Tailings

EPA Region: Region VIII

County, State: Summit County, Utah

General Location in the State: The Lower Silver Creek Tailings Site is located in north-central Utah near Park City. The site surrounds Lower Silver Creek from Highway 248 on the southern end of the site to Interstate 80 on the northern end.

Topographic Map: Park City East

Latitude: 40°43'7.19" North

Longitude: 111°28'14.69" West

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### **SOURCE IDENTIFICATION**

**Description and Location of Source:** The Lower Silver Creek Tailings extend along Silver Creek from Highway 248 on the southern end of the site to Interstate 80 on the northern end. Mine tailings cover much of the site. Tailings deposits were left behind from the Big Four Mill and/or washed onto the site from upstream milling operations. Lower Silver Creek has been placed on the 303(d) list of impaired water bodies for both zinc and cadmium and a Total Maximum Daily Load (TMDL) analysis has been completed (UDEQ-WQD, 2004).

In the fall of 2001, the Utah Department of Environmental Quality (UDEQ) collected over 200 surface soil samples primarily within the tailings deposition area (UDEQ – DERR, 2002). These samples were analyzed by XRF and the XRF Lead Concentration Map presented in this report is presented as Attachment A.

To further investigate the nature and extent of contamination, Tetra Tech conducted field investigations of the Lower Silver Creek Tailings Site during the summer and fall of 2007. Data collection included surface soil, subsurface soil, surface water, and groundwater sampling as well as waste volume quantification. The Tables and Figures listed below, accompanying this report, present a summary of the data collected through these efforts.

#### **Tables**

<b><u>Tables</u></b>	<b><u>Title</u></b>
1a	Phase I Surface Sampling Results
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#### **Figures**

<b><u>Figures</u></b>	<b><u>Title</u></b>
1 (A, B & C)	Surface Soil Sampling Results
2 (A, B & C)	Subsurface Soil Sampling Results
3 (A, B & C)	Groundwater Sampling Results
4 (A, B & C)	Surface Water Sampling Results
5 (A & B)	Preliminary Tailings Volume Estimate
6	Lower Silver Creek Zoning Map

**Source Sample Information:** Phase I sampling was conducted along six transects established at the Site. During the Phase I investigation, 50 surface soil samples were collected and borings were advanced at 25 locations using a direct push geo-probe drill rig. Seventy-two subsurface soil samples were collected from these borings and

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piezometers were installed at 21 of these boring locations. Phase I soil samples were analyzed by X-Ray Fluorescence in Tetra Tech's Fort Collins laboratory.

To further delineate the extent of tailings material within the primary floodplain (tailings depositional) area and to evaluate the presence of metals contamination in the upland areas adjacent to the floodplain, a second phase of investigation was conducted. Phase II activities consisted of the collection of: 269 surface soil samples (0- to 6-inch depth); 30 soil samples from the 6- to 12-inch depth interval at selected surface soil sample locations; excavation of 19 test pits, resulting in an additional 66 soil samples; and the installation of an additional 8 piezometers at 5 locations. The Phase II soil samples were analyzed by a Contract Laboratory Program (CLP) facility using the ILM05.3 Statement of Work (SOW) which defines the analytical methods accepted by the CLP for the isolation, detection, and quantitative measurement of 23 target analyte metals (including mercury) in both water and soil/sediment samples. Analyses were performed using Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) and/or Inductively Coupled Plasma-Mass Spectrometry (ICP-MS).

**Hazardous Waste Volume:** Based on the results of the Phase I and Phase II investigations described above, Tetra Tech estimated the quantity of tailings deposited within the site to be approximately 1,479,000 cubic yards. Figures 5A and 5B, present the average depth of tailings material by area used to estimate this quantity.

**Wetland Delineation:** Tetra Tech has also conducted a wetland delineation survey of the area as part of recent site investigations. The majority of the tailings deposition area within the floodplain has been preliminarily characterized as jurisdictional wetlands. Other wetland areas have also been identified outside of the floodplain area, consisting of both natural and irrigation-induced wetlands. The boundaries of the delineated wetlands are presented on the series of figures presenting sampling results.

**Land Use:** The majority of the property within the Site boundaries is undeveloped and much of it is currently being used for livestock grazing. The pasture areas used for grazing are irrigated with water from Silver Creek through a series of irrigation ditches, which carry water along the east side of the natural creek channel. A fire station is present within the Site boundary (parcel # SS-51-C-1-X) and a recreational trail passes through the entire length of the Site. Current zoning for the Site and surrounding areas is depicted on Figure 6. As indicated much of the Site is zoned Rural Residential which allows for a base residential density of 1 unit per 20 acres on 'Developable Lands' and 1 unit per 40 acres on 'Sensitive Lands'. Pivotal Promontory is currently developing a very large residential community adjacent to the Site along the southeast boundary and owns the majority of the land all along the eastern boundary of the Site. Another developer has purchased parcels SS-22, SS-27, SS-27A, and SS-28 within the northeast portion of the Site and is pursuing residential development. Several other developers hold options to develop several other large tracts of property within the site.

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### **GROUND WATER MIGRATION PATHWAY**

Groundwater samples were collected from the piezometers installed as part of the Tetra Tech Phase I and Phase II investigations described above. These results are presented in Tables 3a and 3b and Figures 3A, 3B, and 3C. These results are representative of the shallow groundwater within the Lower Silver Creek area. No uses of this shallow groundwater were identified in the area, although it is likely that this shallow groundwater interacts with the surface water in Lower Silver Creek.

In a March 20, 2002 report (Appendix 3 of the Richardson Flat Tailings Site Focused Remedial Investigation Report prepared for UPCM dated September 2, 2004), MWH concluded:

- “...no wells develop water from the [Silver Creek] alluvium...due to the low productivity of these unconsolidated aquifers.”
- “...all [water supply] wells are deeper than 150 feet and develop water stored in the Keetley and deeper aquifers.”
- “...hydraulic communication between the shallow and deeper water bearing intervals is poor.”

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### **SURFACE WATER OVERLAND/FLOOD MIGRATION PATHWAY**

Observed Release: The USGS performed a mass-loading tracer test to quantify metals loading to Lower Silver Creek from the upstream Site boundary to the downstream Site boundary (USGS, 2004). Sampling methods and procedures are described in the USGS report. Hazardous substances attributable to the Site were detected at concentrations greater than three times the upstream and benchmark concentrations.

Hazardous Substance	Upgradient Sample ( $\mu\text{g}/\text{L}$ )	Downgradient Sample ( $\mu\text{g}/\text{L}$ )	Aquatic Life Standard ( $\mu\text{g}/\text{L}$ )	Drinking Water Standard ( $\mu\text{g}/\text{L}$ )
	SQ1-0000	SQ3-127		
Cadmium	2.69	47.5	0.6 <sup>1</sup>	5 <sup>2</sup>
Zinc	1,300	9,310	380 <sup>1</sup>	5,000 <sup>2</sup>
Lead	1.62	40.0	11 <sup>1</sup>	15 <sup>2</sup>

<sup>1</sup> The value shown is for dissolved metals (UDEQ-DWQ, 2008).

<sup>2</sup> (EPA – ODW, 2003)

Surface Water Loading: Annual surface water loading rates are presented in the TMDL report (UDEQ-WQD, 2004). The cadmium loading for the site was determined as the difference in loading between the upstream station at Richardson and the downstream station at Above Atkinson (near the wastewater treatment plant). The load calculation is shown below.

25.8 lb/yr (Above Atkinson) – 10.3 lb/yr (Richardson) = 15.5 lb/yr (generated by the Site)

#### **Drinking Water Threat**

Nearest Intake: Echo Reservoir is one of eight reservoirs in the Weber River Basin supplying drinking water to 193,500 residents (UDNR- DWR, 2000). Echo Reservoir is located 12.5 miles (“as the crow flies”) downstream of the Lower Silver Creek Site.

Average annual flow in the Weber River (downstream of confluence with Silver Creek and upstream of Echo Reservoir) is approximately 175 cfs (USGS gauge station 10130500, “Weber River near Coalville, UT”). Water quality data from the Echo Reservoir intake were not evaluated.

Resources: Surface water on the Site is used for commercial stock watering.

#### **Human Food Chain & Environmental Threat**

Stream Classification: Silver Creek is classified as a Class 3A cold water species of game fish and aquatic life segment.

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**Sensitive Environment:** The entire stretch of Lower Silver Creek flowing through the Site (approximately 4.5 miles of stream reach) is bordered by wetlands (Tetra Tech, Inc., 2008) as defined in 40 CFR 230.3. The results of the preliminary wetlands delineation indicate that approximately 494 acres of wetlands are present within the Site boundaries.

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### **SOIL EXPOSURE PATHWAY**

Observed Release: Lead, arsenic, and cadmium contamination have been observed within 200 feet of a terrestrial sensitive environment (wetlands), commercial livestock grazing and production, and a workplace area. Analytical results for these contaminants, at the Phase II surface sample location with the highest lead concentration, are shown below along with screening levels.

Hazardous Substance	Evidence of Observed Release		Screening Level (mg/kg)
	Sample Name/No.	Concentration (mg/kg)	
Lead	UW15-56A1-0.5	23,700	400 <sup>1,2</sup>
Arsenic	UW15-56A1-0.5	745	0.39 <sup>1</sup>
Cadmium	UW15-56A1-0.5	119	37 <sup>2</sup>

<sup>1</sup> (EPA – Region 9, 2004)

<sup>2</sup> (EPA – Region 3, 2007)

Hazardous waste quantity: The hazardous waste quantity was calculated based on Tetra Tech's Phase I and Phase II investigations. The volume of waste on Site is estimated to be 1,479,000 cubic yards (Figures 5a and 5b).

Resident Individuals: At this time, there are no resident individuals within the Site.

Workers: It is estimated that 1 to 100 workers are present on or within 200 feet of the area of contamination on a full-time or part-time basis (e.g., Summit County Fire House).

Resources: Commercial livestock graze on the Site.

Terrestrial Sensitive Environment: Wetlands, which are critical to the maintenance of unique biotic communities, are present on the Site.

### **Nearby Population Threat**

Attractiveness/Accessibility: A designated recreational area exists within the site boundaries. A former rail line through the site has been converted to a recreational rail trail currently owned by the Utah Department of Natural Resources/Parks. The right-of-way for the rail trail varies in width from approximately 100 to 250 feet.

Population within 1 mile: Several residences within the Pivotal Promontory development are within 1 mile of known areas of contamination. Zoning maps show 45 lots within  $\frac{1}{4}$  to  $\frac{1}{2}$  mile of the Rail Trail and 60 lots within  $\frac{1}{2}$  to 1 mile of the Rail Trail. The average persons per household in Summit County are 2.87 persons (USCB, 2000).

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### **AIR MIGRATION PATHWAY**

**Particulate Potential to Release:** An observed release was not documented through direct observation or chemical analysis at the Site. However, given the presence of exposed tailings material throughout the Site, the potential for particulate release exists. Lead is considered to be the driving particulate threat to maintain consistency with the Soil Exposure Pathway.

**Waste Quantity:** As presented previously, the area of contamination extends over 400 acres.

**Nearest Individual:** The Summit County Fire House (parcel # SS-51-C-1-X) is located within the Site and is regularly occupied.

**Potential Population:** Exact population numbers for residents, students, and workers within 4 miles distance were not readily available. Given the local land uses, the estimated population within 4 miles of the Site is:

<b>Distance from Site (miles)</b>	<b>Population Range (persons)</b>
0 to $\frac{1}{4}$	31 – 100
$\frac{1}{4}$ to $\frac{1}{2}$	301 – 1000
$\frac{1}{2}$ to 1	301 – 1000
1 to 2	301 – 1000
2 to 3	301 – 1000
3 to 4	301 - 1000

**Resources:** The Rail Trail, a designated recreational area, is located on Site.

**Sensitive Environment:** Approximately 494 acres of wetlands are present within the Site.

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### **REFERENCES**

1. EPA – Office of Water, 2003. National Primary and Secondary Drinking Water Standards. EPA 816-F-03-016.
2. EPA, 2004. Superfund Chemical Data Matrix, Hazardous Substance Reference Table.
3. EPA – Region 9, 2004. Region 9 Preliminary Remediation Goals Table.  
<http://www.epa.gov/region09/waste/sfund/prg/files/04prgtable.pdf>
4. EPA – Region 3, 2007. Region 3 Risk Based Concentration Table.  
<http://www.epa.gov/reg3hwmd/risk/human/rbc/RBCOct07.pdf>
5. Tetra Tech, Inc. 2008. Lower Silver Creek Wetland Delineation Park City, Utah.
6. U.S. Census Bureau, 2000. U.S Census Bureau: State and County QuickFacts.
7. USGS, 2004. Principal Locations of Metal Loading from Floodplain Tailings, Lower Silver Creek, Utah, 2004.
8. Utah Department of Environmental Quality – Division of Environmental Response and Remediation (UDEQ – DERR), 2002. Innovative Assessment Analytical Results Report, Lower Silver Creek, Summit County, Utah.
9. Utah Department of Environmental Quality – Division of Water Quality (UDEQ-DWQ), 2004. Silver Creek: Total Maximum Daily Load for Dissolved Zinc and Cadmium.
10. UDEQ-DWQ, 2008. Utah Administrative Code Rule R317-2 - Standards of Quality for Waters of the State.
11. Utah Department of Natural Resources – Division of Water Resources (UDNR-DWR), 2000. Municipal and Industrial Water Supply and Uses in the Weber River Basin.

**Table 1a**  
**Phase I Surface Sampling Results**  
**Lower Silver Creek, Utah**

Sample ID	Parcel	Transect	Floodplain or Upland	E or W	Distance from Center	Depth (feet)	Arsenic (mg/kg)	Cadmium (mg/kg)	Lead (mg/kg)	Zinc (mg/kg)
<b>Applicable Criteria</b>										
<i>Region 9 PRG: Residential Soil</i>										
<b>Applicable Criteria</b>										
T4FE1625-5	?	T4	F	E	1625	0.5	<LOD	<LOD	110.93	342.00
T4UE1875-5	?	T4	U	E	1875	0.5	<LOD	<LOD	87.51	202.74
T5FE2375-5	SS-27-B-X	T5	F	E	2375	0.5	76.97	<LOD	2190.98	1961.78
T5FE2625-5	SS-27-B-X	T5	F	E	2625	0.5	119.69	<LOD	3009.45	2274.10
T5UE3000-5	SS-27-B-X	T5	U	E	3000	0.5	93.02	<LOD	1385.95	1893.12
T5UE3375-5	SS-27-B-X	T5	U	E	3375	0.5	71.06	<LOD	1513.53	1691.66
T6UE1125-5	SS-28-A-1-X	T6	U	E	1125	0.5	148.03	<LOD	2551.06	2318.88
T6UE1350-5	SS-28-A-1-X	T6	U	E	1350	0.5	<LOD	<LOD	359.67	596.89
T6FE0125-5	SS-28-A-X	T6	F	E	0125	0.5	437.85	64.90	7311.18	28531.70
T6FW0375-5	SS-28-A-X	T6	F	W	0375	0.5	3696.24	<LOD	61822.25	70355.38
T6FE0375-5	SS-29	T6	F	E	0375	0.5	<LOD	<LOD	310.21	528.76
T6FE0625-5	SS-29	T6	F	E	0625	0.5	25.42	<LOD	170.27	373.13
T6UW0875-5	SS-29-B-X	T6	U	W	0875	0.5	16.71	<LOD	30.87	161.86
T6UW1375-5	SS-29-B-X	T6	U	W	1375	0.5	<LOD	<LOD	51.37	181.75
T5FE0125-5	SS-44	T5	F	E	0125	0.5	302.86	<LOD	7168.32	24508.08
T5FE0375-5	SS-44	T5	F	E	0375	0.5	614.31	<LOD	9681.57	37951.80
T5FE0625-5	SS-44	T5	F	E	0625	0.5	498.25	61.89	5962.69	20118.88
T5FE1125-5	SS-44	T5	F	E	1125	0.5	71.49	<LOD	1669.71	2878.28
T5FE1625-5	SS-44	T5	F	E	1625	0.5	<LOD	<LOD	533.94	1024.58
T5UW0250-5	SS-44	T5	U	W	0250	0.5	<LOD	<LOD	59.97	219.09
SC1	SS-44					0.5	684.23	60.87	11392.15	24862.06
SC2	SS-44					0.5	546.93	<LOD	10373.73	32250.35
SC3	SS-44					0.5	<LOD	<LOD	689.41	732.91
SC4	SS-44					0.5	141.38	<LOD	4418.09	5077.02
SC5	SS-44					0.5	<LOD	<LOD	844.09	2357.13
SC6	SS-44					0.5	429.87	<LOD	20165.11	28678.13
T3FW0625-5	SS-47	T3	F	W	0625	0.5	132.85	<LOD	3790.61	10162.65
T3FW0875-5	SS-47	T3	F	W	0875	0.5	<LOD	<LOD	78.84	203.39
T4FE0125-5	SS-47	T4	F	E	0125	0.5	1629.87	<LOD	23045.85	55442.08
T4UW0375-5	SS-47	T4	U	W	0375	0.5	<LOD	<LOD	54.36	178.70
T4UW0875-5	SS-47	T4	U	W	0875	0.5	<LOD	<LOD	128.19	361.58
T4UW1375-5	SS-47	T4	U	W	1375	0.5	<LOD	<LOD	1228.96	915.08
T3FE0375-5	SS-50	T3	F	E	0375	0.5	47.95	<LOD	851.01	841.38
T3FE0875-5	SS-50	T3	F	E	0875	0.5	<LOD	<LOD	337.87	562.03
T3FE1375-5	SS-50	T3	F	E	1375	0.5	<LOD	<LOD	576.51	860.82
T3UE1750-5	SS-50	T3	U	E	1750	0.5	<LOD	<LOD	63.62	216.68
T3FW0125-5	SS-50	T3	F	W	0125	0.5	1427.54	<LOD	15411.25	9203.86
T4FE0625-5	SS-51-A	T4	F	E	0625	0.5	228.54	<LOD	3899.98	1300.47
T5FE2125-5	SS-51-C-2-X	T5	F	E	2125	0.5	<LOD	<LOD	1284.60	1647.31
T4FE1125-5	SS-51-UP-X	T4	F	E	1125	0.5	78.83	<LOD	809.24	2091.58
T5UE1875-5	SS-51-UP-X	T5	U	E	1875	0.5	<LOD	<LOD	103.75	236.78
T2UE1125-5	SS-56-A-1	T2	U	E	1125	0.5	<LOD	<LOD	113.99	266.76
T2UW0625-5	SS-56-A-1	T2	U	W	0625	0.5	<LOD	<LOD	101.33	185.69
T2UW1125-5	SS-56-A-1	T2	U	W	1125	0.5	<LOD	<LOD	131.72	253.67
T3UW1125-5	SS-57-1	T3	U	W	1125	0.5	<LOD	<LOD	116.08	201.02
T3UW1625-5	SS-57-1	T3	U	W	1625	0.5	<LOD	<LOD	77.01	196.35
T1FW0125-5	SS-65-A-3	T1	F	W	0125	0.5	143.80	<LOD	3388.66	4812.35
T1UW0500-5	SS-65-A-3	T1	U	W	0500	0.5	37.23	<LOD	404.35	546.73
PILE	unknown					0.5	1140.05	113.00	18723.50	38783.01

**Legend**

<LOD: Value not detected above the Limit of Detection

**Note**

1) Samples were analyzed by X-Ray Fluorescence. XRF readings above approximately 10,000 ppm should be considered approximate.

**Table 1b**  
**Phase II Surface Sample Results**  
**Lower Silver Creek, Utah**

Sample ID	Parcel ID	Sample Depth	East or West	Arsenic (mg/kg)	Cadmium (mg/kg)	Lead (mg/kg)	Zinc (mg/kg)
<b>Applicable Criteria</b>	<b>Region 9 PRG: Residential Soil</b>			<b>0.39</b>	<b>37</b>	<b>400</b>	<b>23000</b>
<b>Applicable Criteria</b>	<b>Region 9 PRG: Industrial Soil</b>			<b>2</b>	<b>450</b>	<b>800</b>	<b>100000</b>
UE01-22-0.5	22	0.5	E	7.3	0.53	31.8	98.8
UE02-22-0.5	22	0.5	E	5.3	0.91	34.7	128
UE01-27-0.5	27	0.5	E	5.9	0.52	27.7	76.2
UE02-27-0.5	27	0.5	E	6.1	0.54	31.7	71.2
UE03-27-0.5	27	0.5	E	7	0.46	23.4	67.7
UE04-27-0.5	27	0.5	E	4.9	0.36	15.3	62.6
UE05-27-0.5	27	0.5	E	4.7	0.46	19.1	69
UE06-27-0.5	27	0.5	E	5.6	0.5	28.3	73.1
UE07-27-0.5	27	0.5	E	11.1	1.2	46.7	177
UE08-27-0.5	27	0.5	E	6.8	1.2	40.6	142
UE09-27-0.5	27	0.5	E	5.3	0.44	27.1	57.7
UE10-27-0.5	27	0.5	E	5	0.4	13.1	61.1
UE11-27-0.5	27	0.5	E	6.4	0.42	17.9	51.3
UE12-27-0.5	27	0.5	E	5.5	0.42	19.3	61.1
UE13-27-0.5	27	0.5	E	4.7	0.45	18.2	73.1
UE14-27-0.5	27	0.5	E	4.2	0.43	16.2	75.6
UE15-27-0.5	27	0.5	E	6	0.64	24.9	94.4
UE16-27-0.5	27	0.5	E	7.2	0.6	32.5	82.4
UE17-27-0.5	27	0.5	E	5	0.39	15.3	49.9
UE18-27-0.5	27	0.5	E	6.3	0.64	25.5	70.1
UE19-27-0.5	27	0.5	E	8.5	0.95	57.2	125
UE20-27-0.5	27	0.5	E	13.8	2.3	241	473
UE21-27-0.5	27	0.5	E	5.5	0.86	32.9	133
UE22-27-0.5	27	0.5	E	5	0.51	32.9	109
UE23-27-0.5	27	0.5	E	6.6	0.85	52	146
UE24-27-0.5	27	0.5	E	9.2	2	108	502
UE25-27-0.5	27	0.5	E	5.4	0.81	43.8	120
UE26-27-0.5	27	0.5	E	10	2.3	153	827
UE27-27-0.5	27	0.5	E	5.7	0.44	20.7	49.3
UE01-28-0.5	28	0.5	E	4.5	1.1	65.5	173
UE02-28-0.5	28	0.5	E	6.7	1.4	98.8	272
UE03-28-0.5	28	0.5	E	7.7	0.99	41.2	86.9
UE04-28-0.5	28	0.5	E	8.1	1.3	70.4	134
UE05-28-0.5	28	0.5	E	10	1.4	68.5	165
UE06-28-0.5	28	0.5	E	5.9	0.6	29.9	93.8
UE07-28-0.5	28	0.5	E	13.9	2.3	220	430
UE08-28-0.5	28	0.5	E	5.7	0.6	29.5	80.7
UE09-28-0.5	28	0.5	E	6.3	0.73	44.2	126
UE10-28-0.5	28	0.5	E	7.8	0.43	19.6	67.2
UE01-29-0.5	29	0.5	E	19.5	5.2	402	754
UE02-29-0.5	29	0.5	E	22.9	4.7	569	806
UE03-29-0.5	29	0.5	E	40.9	5.4	765	870
UE04-29-0.5	29	0.5	E	89.9	10.9	2080	1990
UE05-29-0.5	29	0.5	E	23.1	3.6	431	624
UE06-29-0.5	29	0.5	E	18.1	2.5	283	439
UE07-29-0.5	29	0.5	E	52.7	5.9	1000	1020
UE08-29-0.5	29	0.5	E	53.7	6.7	1170	1090
UW01-29-0.5	29	0.5	W	8.3	0.64	45.5	89.7
UW02-29-0.5	29	0.5	W	8.1	0.69	38.4	89.3
UW03-29-0.5	29	0.5	W	8.7	0.79	59.4	98.5
UW04-29-0.5	29	0.5	W	4.3	0.47	28.5	66
UW05-29-0.5	29	0.5	W	9	0.71	61.6	112
UW06-29-0.5	29	0.5	W	3.8	0.46	26.5	70
UW07-29-0.5	29	0.5	W	5.4	0.37	23.3	55.7
UW08-29-0.5	29	0.5	W	6.8	2.5	185	323
UE01-44-0.5	44	0.5	E	383	90.5	9410	15100
UE02-44-0.5	44	0.5	E	58.4	10.7	1420	1910

**Table 1b**  
**Phase II Surface Sample Results**  
**Lower Silver Creek, Utah**

Sample ID	Parcel ID	Sample Depth	East or West	Arsenic (mg/kg)	Cadmium (mg/kg)	Lead (mg/kg)	Zinc (mg/kg)
<b>Applicable Criteria</b>	<b>Region 9 PRG: Residential Soil</b>			<b>0.39</b>	<b>37</b>	<b>400</b>	<b>23000</b>
<b>Applicable Criteria</b>	<b>Region 9 PRG: Industrial Soil</b>			<b>2</b>	<b>450</b>	<b>800</b>	<b>100000</b>
UE03-44-0.5	44	0.5	E	46.4	7.1	894	1270
UE04-44-0.5	44	0.5	E	10.7	0.72	53.6	131
UE05-44-0.5	44	0.5	E	180	33.5	4880	6100
UW01-44-0.5	44	0.5	W	11.9	2.6	159	459
UW01-47-0.5	47	0.5	W	7.3	0.84	73.9	118
UW02-47-0.5	47	0.5	W	5.9	0.72	50.8	68.2
UW03-47-0.5	47	0.5	W	8.9	1.1	120	181
UW04-47-0.5	47	0.5	W	14.6	6.7	361	1300
UW05-47-0.5	47	0.5	W	7.8	0.68	42.5	99.1
UW06-47-0.5	47	0.5	W	19.2	5.4	343	902
UW07-47-0.5	47	0.5	W	10.1	0.98	73.8	94.3
UW08-47-0.5	47	0.5	W	4.9	0.41	15.6	47.1
UW09-47-0.5	47	0.5	W	7	0.69	34.5	92.4
UW10-47-0.5	47	0.5	W	6.1	0.4	30.6	59.8
UW11-47-0.5	47	0.5	W	9.2	0.86	50.6	125
UW12-47-0.5	47	0.5	W	7.7	0.83	57.8	89.2
UW13-47-0.5	47	0.5	W	5.7	0.48	21.2	54.8
UW14-47-0.5	47	0.5	W	5.7	0.39	15.3	42.8
UW15-47-0.5	47	0.5	W	7	0.69	45.6	92.3
UW16-47-0.5	47	0.5	W	6.1	0.54	26	73.5
UW17-47-0.5	47	0.5	W	9.7	0.82	55.6	115
UW18-47-0.5	47	0.5	W	9.7	0.8	53.8	128
UW19-47-0.5	47	0.5	W	7.4	0.7	36.5	72.7
UW20-47-0.5	47	0.5	W	6.4	0.41	28.4	48.1
UW21-47-0.5	47	0.5	W	10	0.9	39	127
UW22-47-0.5	47	0.5	W	8.2	0.81	42.1	104
UW23-47-0.5	47	0.5	W	10.1	1.1	77.6	141
UW24-47-0.5	47	0.5	W	145	22.1	3830	5180
UW25-47-0.5	47	0.5	W	8.7	0.7	48.1	74.2
UW26-47-0.5	47	0.5	W	8.5	0.7	32.6	97.1
UW27-47-0.5	47	0.5	W	5.9	0.46	31.2	69.4
UW28-47-0.5	47	0.5	W	7.1	0.61	33.4	82.2
UW29-47-0.5	47	0.5	W	8.8	0.83	46.7	109
UW30-47-0.5	47	0.5	W	6.9	0.6	37.9	91.5
UW32-47-0.5	47	0.5	W	5.3	0.44	22.3	72
UW33-47-0.5	47	0.5	W	6.7	0.64	37.9	81.5
UW34-47-0.5	47	0.5	W	7	0.64	36.2	91.8
UW35-47-0.5	47	0.5	W	4.9	0.49	22.8	67.5
UW36-47-0.5	47	0.5	W	10.3	0.63	28.9	80.9
UW37-47-0.5	47	0.5	W	28.4	10.2	735	1820
UE01-49-0.5	49	0.5	E	78.7	9.9	1750	1660
UE02-49-0.5	49	0.5	E	38.9	6.4	708	1010
UE01-50-0.5	50	0.5	E	10.8	0.95	72.4	131
UE02-50-0.5	50	0.5	E	51	14.7	1450	2660
UE03-50-0.5	50	0.5	E	7.6	0.66	30.6	92.2
UE04-50-0.5	50	0.5	E	5.4	0.54	23.1	74.6
UE05-50-0.5	50	0.5	E	209	23.6	5070	5820
UE06-50-0.5	50	0.5	E	8.2	0.92	44.5	112
UE07-50-0.5	50	0.5	E	11.3	1.9	87	346
UE08-50-0.5	50	0.5	E	6.6	0.69	41.1	89.8
UE09-50-0.5	50	0.5	E	66.2	9.6	1620	1810
UE10-50-0.5	50	0.5	E	9.2	0.86	56.5	110
UE11-50-0.5	50	0.5	E	15.9	2.9	311	502
UE12-50-0.5	50	0.5	E	7.5	0.72	42.3	94.5
UE13-50-0.5	50	0.5	E	168	24.3	4320	2870
UE14-50-0.5	50	0.5	E	16.9	3.2	218	706
UE15-50-0.5	50	0.5	E	8.8	0.71	30.8	98.7

**Table 1b**  
**Phase II Surface Sample Results**  
**Lower Silver Creek, Utah**

Sample ID	Parcel ID	Sample Depth	East or West	Arsenic (mg/kg)	Cadmium (mg/kg)	Lead (mg/kg)	Zinc (mg/kg)
<b>Applicable Criteria</b>	<b>Region 9 PRG: Residential Soil</b>			<b>0.39</b>	<b>37</b>	<b>400</b>	<b>23000</b>
<b>Applicable Criteria</b>	<b>Region 9 PRG: Industrial Soil</b>			<b>2</b>	<b>450</b>	<b>800</b>	<b>100000</b>
UE16-50-0.5	50	0.5	E	6.1	0.63	31.5	86.4
UE17-50-0.5	50	0.5	E	14.5	2.1	188	283
UE18-50-0.5	50	0.5	E	307	22.2	7380	4850
UE19-50-0.5	50	0.5	E	8.9	0.85	57.1	133
UE20-50-0.5	50	0.5	E	5.8	0.63	31	86.7
UE21-50-0.5	50	0.5	E	21.6	3.8	406	466
UE22-50-0.5	50	0.5	E	12.7	2.7	117	727
UE23-50-0.5	50	0.5	E	13.3	1.9	163	345
UE24-50-0.5	50	0.5	E	5.5	0.57	19.6	78.8
UE01-56-0.5	56	0.5	E	19.1	3.2	338	444
UE02-56-0.5	56	0.5	E	27.9	6.5	574	1040
UE03-56-0.5	56	0.5	E	6.3	0.7	35.2	101
UE05-56-0.5	56	0.5	E	19.1	16.2	260	2030
UE06-56-0.5	56	0.5	E	8.4	0.78	35	107
UE07-56-0.5	56	0.5	E	11.2	1.4	108	232
UE08-56-0.5	56	0.5	E	28.9	5.3	616	1070
UE09-56-0.5	56	0.5	E	5.4	0.73	31.6	91.7
UW01-56-0.5	56	0.5	E	6	0.68	51.2	80.7
UE04-56-0.5	56	0.5	W	389	34.4	18100	10100
UW02-56-0.5	56	0.5	W	6.1	0.91	75.1	106
UW03-56-0.5	56	0.5	W	62.8	36.2	2480	3020
UW04-56-0.5	56	0.5	W	5.9	0.58	47.4	70.2
UW05-56-0.5	56	0.5	W	9.1	0.83	74.7	115
UW06-56-0.5	56	0.5	W	4.5	0.72	46	90.1
UW07-56-0.5	56	0.5	W	5.9	0.58	34.7	78.2
UE01-CNTY-0.5	27BX	0.5	E	13	2	177	311
UE02-CNTY-0.5	27BX	0.5	E	9.4	0.96	67.2	133
UE03-CNTY-0.5	27BX	0.5	E	10.7	1.3	127	235
UE04-CNTY-0.5	27BX	0.5	E	10.8	1.8	149	361
UE05-CNTY-0.5	27BX	0.5	E	88	13.1	2430	1920
UE06-CNTY-0.5	27BX	0.5	E	52.7	6	1030	927
UE07-CNTY-0.5	27BX	0.5	E	41.2	5.5	842	830
UE08-CNTY-0.5	27BX	0.5	E	104	13.3	2030	1820
UE09-CNTY-0.5	27BX	0.5	E	56.7	8.1	1330	1080
UE10-CNTY-0.5	27BX	0.5	E	32.3	3.9	574	694
UE11-CNTY-0.5	27BX	0.5	E	139	15.5	3310	2600
UE12-CNTY-0.5	27BX	0.5	E	182	20.9	4080	3800
UE13-CNTY-0.5	27BX	0.5	E	17.8	1.8	253	288
UE14-CNTY-0.5	27BX	0.5	E	54.2	6.9	1100	1170
UE01-28A1X-0.5	28A1X	0.5	E	9.2	0.91	70.6	123
UE02-28A1X-0.5	28A1X	0.5	E	54.5	6.3	1090	1040
UE03-28A1X-0.5	28A1X	0.5	E	10.5	1	73.8	145
UE04-28A1X-0.5	28A1X	0.5	E	89.6	8.8	2000	1760
UE05-28A1X-0.5	28A1X	0.5	E	23.6	2	264	269
UE06-28A1X-0.5	28A1X	0.5	E	79.2	9	1840	1830
UE07-28A1X-0.5	28A1X	0.5	E	84.6	9.2	788	1500
UE08-28A1X-0.5	28A1X	0.5	E	15.4	3.7	305	496
UE09-28A1X-0.5	28A1X	0.5	E	130	15.3	3030	2640
UE10-28A1X-0.5	28A1X	0.5	E	28	3.6	601	556
UE11-28A1X-0.5	28A1X	0.5	E	22.4	3.2	380	422
UE12-28A1X-0.5	28A1X	0.5	E	50.5	5.6	996	1120
UE01-RR-0.5	28UPX	0.5	E	19	3.7	375	639
UE01-44B-0.5	44B	0.5	E	7.6	1.1	86.4	224
UE01-51A-0.5	51A	0.5	E	38.1	4.3	609	726
UE18-CNTY-0.5	51BX	0.5	E	17.6	2.1	217	334
UE21-CNTY-0.5	51C1X	0.5	E	11.8	1.3	113	225
UE15-CNTY-0.5	51C2X	0.5	E	52.7	6.5	1050	1440

**Table 1b**  
**Phase II Surface Sample Results**  
**Lower Silver Creek, Utah**

Sample ID	Parcel ID	Sample Depth	East or West	Arsenic (mg/kg)	Cadmium (mg/kg)	Lead (mg/kg)	Zinc (mg/kg)
<b>Applicable Criteria</b>	<b>Region 9 PRG: Residential Soil</b>			<b>0.39</b>	<b>37</b>	<b>400</b>	<b>23000</b>
<b>Applicable Criteria</b>	<b>Region 9 PRG: Industrial Soil</b>			<b>2</b>	<b>450</b>	<b>800</b>	<b>100000</b>
UE16-CNTY-0.5	51C2X	0.5	E	6.9	0.64	34.9	83
UE17-CNTY-0.5	51C2X	0.5	E	30	3	601	591
UE19-CNTY-0.5	51C2X	0.5	E	9.7	0.7	33.8	92.2
UE22-CNTY-0.5	51C2X	0.5	E	57	7.3	889	1160
UE23-CNTY-0.5	51C2X	0.5	E	12.2	1.3	94.6	172
UE24-CNTY-0.5	51C2X	0.5	E	10.4	1.1	75.3	142
UE26-CNTY-0.5	51C2X	0.5	E	15.1	1.9	190	290
UE27-CNTY-0.5	51C2X	0.5	E	101	12.5	3170	6060
UE02-RR-0.5	51UPX	0.5	E	222	24.3	4790	6010
UE03-RR-0.5	51UPX	0.5	E	11.6	1.2	109	193
UE04-RR-0.5	51UPX	0.5	E	20	2.1	223	355
UE05-RR-0.5	51UPX	0.5	E	13	1.4	97.7	203
UW01-56A-0.5	56A	0.5	W	445	37.6	20100	11600
UE01-56A-0.5	56A	0.5	E	67.1	9.7	986	2690
UE02-56A-0.5	56A	0.5	E	6.3	0.64	18.1	86.5
UE03-56A-0.5	56A	0.5	E	5.7	0.61	22.3	77
UE04-56A-0.5	56A	0.5	E	12.1	10	799	861
UE05-56A-0.5	56A	0.5	E	12.8	3.4	188	857
UE06-56A-0.5	56A	0.5	E	7	1.1	80	139
UE07-56A-0.5	56A	0.5	E	6.2	0.97	71.5	128
UE08-56A-0.5	56A	0.5	E	6	0.65	35.1	96
UE09-56A-0.5	56A	0.5	E	5.7	0.61	22.2	79.8
UE10-56A-0.5	56A	0.5	E	7.4	0.87	49	138
UE11-56A-0.5	56A	0.5	E	8	0.88	49.8	108
UE01-56A1-0.5	56A1	0.5	E	262	37.9	5640	6270
UE02-56A1-0.5	56A1	0.5	E	7.7	1	42.8	136
UE03-56A1-0.5	56A1	0.5	E	9.1	1.2	79.4	173
UE04-56A1-0.5	56A1	0.5	E	24.7	4.9	527	953
UE05-56A1-0.5	56A1	0.5	E	8.2	0.83	49.8	122
UE06-56A1-0.5	56A1	0.5	E	7.3	0.88	76.4	144
UE07-56A1-0.5	56A1	0.5	E	11.2	1.8	170	271
UE08-56A1-0.5	56A1	0.5	E	7	0.86	49.3	114
UE09-56A1-0.5	56A1	0.5	E	5.2	0.59	24.7	78.3
UE10-56A1-0.5	56A1	0.5	E	5.7	0.65	29.8	82.3
UE11-56A1-0.5	56A1	0.5	E	5.7	0.67	42.7	90.8
UE12-56A1-0.5	56A1	0.5	E	5.9	0.66	34.3	80.5
UE13-56A1-0.5	56A1	0.5	E	6.1	0.58	24.9	73
UE14-56A1-0.5	56A1	0.5	E	5.4	0.54	28.5	80.2
UE15-56A1-0.5	56A1	0.5	E	7.5	0.76	33.7	109
UE16-56A1-0.5	56A1	0.5	E	6.7	0.72	28.2	99.6
UW01-56A1-0.5	56A1	0.5	W	5.2	0.42	22.3	45.9
UW02-56A1-0.5	56A1	0.5	W	8.4	1.3	100	175
UW03-56A1-0.5	56A1	0.5	W	8.7	1.3	129	189
UW04-56A1-0.5	56A1	0.5	W	7.1	0.54	69.1	84.5
UW06-56A1-0.5	56A1	0.5	W	7.8	0.79	53.1	105
UW07-56A1-0.5	56A1	0.5	W	5.5	0.42	29.5	42.1
UW08-56A1-0.5	56A1	0.5	W	6.6	0.69	49.2	76.3
UW09-56A1-0.5	56A1	0.5	W	6.6	0.73	37.2	91.3
UW10-56A1-0.5	56A1	0.5	W	16.4	8.7	558	592
UW11-56A1-0.5	56A1	0.5	W	6.8	0.65	51.3	75.5
UW12-56A1-0.5	56A1	0.5	W	9	1.2	109	132
UW13-56A1-0.5	56A1	0.5	W	7.4	0.64	45.6	79
UW14-56A1-0.5	56A1	0.5	W	5.6	0.83	77.9	126
UW15-56A1-0.5	56A1	0.5	W	745	119	23700	18400
UW16-56A1-0.5	56A1	0.5	W	7.1	0.54	36.8	62
UW17-56A1-0.5	56A1	0.5	W	5.9	0.55	23	61.5
UW18-56A1-0.5	56A1	0.5	W	5.8	0.5	25	60

**Table 1b**  
**Phase II Surface Sample Results**  
**Lower Silver Creek, Utah**

Sample ID	Parcel ID	Sample Depth	East or West	Arsenic (mg/kg)	Cadmium (mg/kg)	Lead (mg/kg)	Zinc (mg/kg)
<b>Applicable Criteria</b>	<b>Region 9 PRG: Residential Soil</b>			<b>0.39</b>	<b>37</b>	<b>400</b>	<b>23000</b>
<b>Applicable Criteria</b>	<b>Region 9 PRG: Industrial Soil</b>			<b>2</b>	<b>450</b>	<b>800</b>	<b>100000</b>
UW19-56A1-0.5	56A1	0.5	W	7	0.86	51.4	110
UW20-56A1-0.5	56A1	0.5	W	29.2	11.1	857	1070
UW21-56A1-0.5	56A1	0.5	W	5.3	0.62	25.5	77.2
UW22-56A1-0.5	56A1	0.5	W	5.3	0.58	24.1	67.8
UW23-56A1-0.5	56A1	0.5	W	5.4	0.61	27.9	73.7
UW24-56A1-0.5	56A1	0.5	W	7.6	1.3	93.8	176
UW05-56A1-0.5	56A1	0.5	W	36.3	19.5	2120	2130
UE06-RR-0.5	56UPX	0.5	E	25	3.8	390	739
UE07-RR-0.5	56UPX	0.5	E	36.9	6.7	792	1230
UE08-RR-0.5	56UPX	0.5	E	12.8	2	165	314
UE09-RR-0.5	56UPX	0.5	E	110	64	2340	11100
UE01-64A-0.5	64A	0.5	E	6.7	0.9	47.6	132
UE02-64A-0.5	64A	0.5	E	5.8	0.71	38.3	104
UE03-64A-0.5	64A	0.5	E	6.5	0.7	35.3	94.2
UE04-64A-0.5	64A	0.5	E	7.3	0.8	55.3	107
UE05-64A-0.5	64A	0.5	E	5.7	0.58	32.9	82.6
UE06-64A-0.5	64A	0.5	E	7.6	1.1	79.7	197
UE07-64A-0.5	64A	0.5	E	5.9	0.83	52.6	127
UE08-64A-0.5	64A	0.5	E	8.4	0.92	64.6	128
UE09-64A-0.5	64A	0.5	E	6.8	0.79	46.7	119
UE10-64A-0.5	64A	0.5	E	6.3	0.61	34.3	82.9
UE11-64A-0.5	64A	0.5	E	8.1	1.3	116	200
UE12-64A-0.5	64A	0.5	E	5.6	0.56	22.8	73.7
UE13-64A-0.5	64A	0.5	E	6.1	0.59	31.7	75.1
UE14-64A-0.5	64A	0.5	E	6.5	0.56	32.7	80
UE15-64A-0.5	64A	0.5	E	5.7	0.83	69.5	126
UE16-64A-0.5	64A	0.5	E	5.7	0.67	49.8	98.8
UE17-64A-0.5	64A	0.5	E	3.9	0.42	16.5	61.1
UE18-64A-0.5	64A	0.5	E	6.3	0.77	68.4	115
UE19-64A-0.5	64A	0.5	E	6	0.71	48	110
UE20-64A-0.5	64A	0.5	E	5.4	0.75	56.1	120
UE21-64A-0.5	64A	0.5	E	5.4	0.65	54.5	94.9
UE22-64A-0.5	64A	0.5	E	7	0.75	65.1	125
UE23-64A-0.5	64A	0.5	E	6	0.83	71.6	135
UE24-64A-0.5	64A	0.5	E	8.9	0.96	74.3	139
UW01-64A-0.5	64A	0.5	W	271	38.9	9830	6380
UW02-64A-0.5	64A	0.5	W	6.7	0.8	88.5	151
UW03-64A-0.5	64A	0.5	W	12	2.1	223	397
UW04-64A-0.5	64A	0.5	W	39.6	17.5	1160	3010
UW01-65A3-0.5	65A3	0.5	W	16.5	2.1	144	341
UW02-65A3-0.5	65A3	0.5	W	12.4	1.3	101	203

**Note**

1) Samples were analyzed by Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) and/or Inductively Coupled Plasma-Mass Spectrometry (ICP-MS).

**Table 2a**  
**Phase I Subsurface Sampling Results**  
**Lower Silver Creek, Utah**

Sample ID	Parcel	Transect	Floodplain or Upland	E or W	Distance from Center	Depth (feet)	Arsenic (mg/kg)	Cadmium (mg/kg)	Lead (mg/kg)	Zinc (mg/kg)
<b>Applicable Criteria</b>			<b>Region 9 PRG: Residential Soil</b>						<b>0.39</b>	<b>37</b>
<b>Applicable Criteria</b>			<b>Region 9 PRG: Industrial Soil</b>						<b>2</b>	<b>450</b>
T6UE1625-1	SS-27-B-X	T6	U	E	1625	1	<LOD	<LOD	54.88	190.99
T6UE2125-1	SS-27-B-X	T6	U	E	2125	1	<LOD	<LOD	64.10	195.02
T6UE1350-5	SS-28-A-1-X	T6	U	E	1350	0.5	<LOD	<LOD	359.67	596.89
T6UE1350-4	SS-28-A-1-X	T6	U	E	1350	4	26.89	<LOD	66.97	136.34
T6UE1350-10	SS-28-A-1-X	T6	U	E	1350	10	<LOD	<LOD	39.43	183.73
T6FW0175-1	SS-28-A-X	T6	F	W	0175	1	385.24	<LOD	6615.20	13370.51
T6FW0175-6	SS-28-A-X	T6	F	W	0175	6	3632.12	177.77	61723.07	169889.50
T6FW0175-10	SS-28-A-X	T6	F	W	0175	10	78.16	<LOD	803.13	1164.45
T6FW0625-1.5	SS-28-A-X	T6	F	W	0625	1.5	196.97	<LOD	6700.97	12657.41
T6FW0625-4	SS-28-A-X	T6	F	W	0625	4	1097.21	88.55	24477.27	30216.73
T6FW0625-9	SS-28-A-X	T6	F	W	0625	9	29.94	<LOD	108.49	270.44
T6FW0625-10	SS-28-A-X	T6	F	W	0625	10	<LOD	<LOD	447.79	574.72
T6FE0375-.5	SS-29	T6	F	E	0375	0.5	<LOD	<LOD	310.21	528.76
T6FE0375-4	SS-29	T6	F	E	0375	4	<LOD	<LOD	38.52	117.45
T6FE0375-10	SS-29	T6	F	E	0375	10	<LOD	<LOD	35.67	146.23
T4FE0375-1	SS-44	T4	F	E	0375	1	1523.00	123.15	24487.70	50480.37
T4FE0375-8	SS-44	T4	F	E	0375	8	<LOD	<LOD	237.99	414.25
T4FE0375-10	SS-44	T4	F	E	0375	10	<LOD	<LOD	47.63	164.96
T5FE0875-3.5	SS-44	T5	F	E	0875	3.5	2032.31	96.69	41416.20	57439.58
T5FE0875-7	SS-44	T5	F	E	0875	7	<LOD	<LOD	70.43	211.99
T5FE0875-10	SS-44	T5	F	E	0875	10	22.19	<LOD	125.89	289.54
T5UE1375-1	SS-44	T5	U	E	1375	1	<LOD	<LOD	909.51	1019.14
T5UE1375-7	SS-44	T5	U	E	1375	7	<LOD	<LOD	40.70	150.78
T5UE1375-10	SS-44	T5	U	E	1375	10	<LOD	<LOD	33.90	75.44
T5FW0125-1	SS-44	T5	F	W	0125	1	536.69	64.86	8925.15	13953.24
T5FW0125-09	SS-44	T5	F	W	0125	9	56.39	<LOD	32.75	145.37
T5FW0125-10	SS-44	T5	F	W	0125	10	<LOD	<LOD	34.91	171.96
T4FE0125.5	SS-47	T4	F	E	0125	5	1082.65	134.91	21035.42	48248.36
T4UW0125-1	SS-47	T4	U	W	0125	1	36.84	<LOD	517.42	1625.99
T4UW0125-05	SS-47	T4	U	W	0125	5	<LOD	<LOD	46.59	88.23
T3FE0125-1	SS-50	T3	F	E	0125	1	234.37	<LOD	8849.42	9991.00
T3FE0125-7	SS-50	T3	F	E	0125	7	<LOD	<LOD	207.96	289.38
T3FE0125-10	SS-50	T3	F	E	0125	10	<LOD	<LOD	32.60	129.52
T3UE0625-1	SS-50	T3	U	E	0625	1	<LOD	<LOD	172.60	
T3UE0625-1A	SS-50	T3	U	E	0625	1	24.80	<LOD	105.78	224.03
T3UE0625-8	SS-50	T3	U	E	0625	8	15.83	<LOD	35.20	145.83
T3UE0625-10	SS-50	T3	U	E	0625	10	<LOD	<LOD	35.68	122.14
T3UE1125-1.5	SS-50	T3	U	E	1125	1.5	<LOD	<LOD	124.15	371.25
T3UE1125-7	SS-50	T3	U	E	1125	7	16.56	<LOD	29.28	149.77
T3UE1125-10	SS-50	T3	U	E	1125	10	<LOD	<LOD	23.85	133.43
T3FW0375-2	SS-50	T3	F	W	0375	2	806.66	71.50	16064.45	27895.00
T3FW0375-5.5	SS-50	T3	F	W	0375	5.5	<LOD	<LOD	108.17	271.60
T3FW0375-10	SS-50	T3	F	W	0375	10	<LOD	<LOD	42.37	166.42
T4FE0875-1.5	SS-51-A	T4	F	E	0875	1.5	66.95	<LOD	746.03	802.80
T4FE0875-07	SS-51-A	T4	F	E	0875	7	<LOD	<LOD	111.12	162.95
T4FE0875-10	SS-51-A	T4	F	E	0875	10	<LOD	<LOD	42.36	163.96
T4UE1375-1	SS-51-C-2-X	T4	U	E	1375	1	<LOD	<LOD	143.24	274.72
T4UE1375-7	SS-51-C-2-X	T4	U	E	1375	7	<LOD	<LOD	27.44	149.39
T4UE1375-10	SS-51-C-2-X	T4	U	E	1375	10	<LOD	<LOD	37.01	166.73
T5UE1875-5	SS-51-UP-X	T5	U	E	1875	0.5	<LOD	<LOD	103.75	236.78
T5UE1875-4	SS-51-UP-X	T5	U	E	1875	4	<LOD	<LOD	34.44	144.44
T5UE1875-10	SS-51-UP-X	T5	U	E	1875	10	<LOD	<LOD	37.15	143.75
T2FE0125-1	SS-56-A-1	T2	F	E	0125	1	623.22	<LOD	16346.19	17808.12
T2FE0125-6	SS-56-A-1	T2	F	E	0125	6	<LOD	<LOD	95.83	243.27
T2FE0125-11.5	SS-56-A-1	T2	F	E	0125	11.5	32.38	<LOD	167.82	371.41
T2FW0125-1	SS-56-A-1	T2	F	W	0125	1	1477.13	<LOD	25043.59	35486.20
T2FW0125-2.5	SS-56-A-1	T2	F	W	0125	2.5	<LOD	<LOD	152.49	322.88

**Table 2a**  
**Phase I Subsurface Sampling Results**  
**Lower Silver Creek, Utah**

Sample ID	Parcel	Transect	Floodplain or Upland	E or W	Distance from Center	Depth (feet)	Arsenic (mg/kg)	Cadmium (mg/kg)	Lead (mg/kg)	Zinc (mg/kg)
<b>Applicable Criteria</b>			<i>Region 9 PRG: Residential Soil</i>				0.39	37	400	23000
<b>Applicable Criteria</b>			<i>Region 9 PRG: Industrial Soil</i>				2	450	800	100000
T2FW0125-8	SS-56-A-1	T2	F	W	0125	8	<LOD	<LOD	54.87	183.08
T2FW0125-12	SS-56-A-1	T2	F	W	0125	12	<LOD	<LOD	39.93	162.12
T2FW0375-1.5	SS-56-A-1	T2	F	W	0375	1.5	15.96	<LOD	77.11	227.59
T2FW0375-6	SS-56-A-1	T2	F	W	0375	6	<LOD	<LOD	28.91	152.56
T2FW0375-10	SS-56-A-1	T2	F	W	0375	10	<LOD	<LOD	33.66	131.25
T1FW0125-.5	SS-56-A-3	T1	F	W	0125	0.5	143.80	<LOD	3388.66	4812.35
T1FW0125-08	SS-56-A-3	T1	F	W	0125	8	437.81	<LOD	11087.42	16123.51
T1FW0125-12	SS-56-A-3	T1	F	W	0125	12	<LOD	<LOD	37.17	178.32
T2UE0625-1.5	SS-56-UP-X	T2	U	E	0625	1.5	<LOD	<LOD	2239.74	2889.18
T2UE0625-6	SS-56-UP-X	T2	U	E	0625	6	<LOD	<LOD	78.25	270.74
T2UE0625-9.5	SS-56-UP-X	T2	U	E	0625	9.5	<LOD	<LOD	208.13	388.27
T2UE0625-14	SS-56-UP-X	T2	U	E	0625	14	<LOD	<LOD	73.21	141.98
T1FE0125-01	SS-64-1000-UP-X	T1	F	E	0125	1	623.39	<LOD	22993.57	29582.73
T1FE0125-5.5	SS-64-1000-UP-X	T1	F	E	0125	5.5	31.12	60.75	151.82	2477.40
T1FE0125-08	SS-64-1000-UP-X	T1	F	E	0125	8	46.28	<LOD	183.02	337.86

**Legend**

<LOD: Value not detected above the Limit of Detection

**Note**

1) Samples were analyzed by X-Ray Fluorescence. XRF readings above approximately 10,000 ppm should be considered approximate.

2) Data for all samples taken at each subsurface sample location are shown, including surface samples.

**Table 2b**  
**Phase II Subsurface Sample Results**  
**Lower Silver Creek, Utah**

Sample ID	Parcel ID	Sample Depth	East or West	Arsenic (mg/kg)	Cadmium (mg/kg)	Lead (mg/kg)	Zinc (mg/kg)
<b>Applicable Criteria</b>	<b>Region 9 PRG: Residential Soil</b>			<b>0.39</b>	<b>37</b>	<b>400</b>	<b>23000</b>
<b>Applicable Criteria</b>	<b>Region 9 PRG: Industrial Soil</b>			<b>2</b>	<b>450</b>	<b>800</b>	<b>100000</b>
UE03-28-0.5	28	0.5	E	7.7	0.99	41.2	86.9
UE03-28-1.0	28	1.0	E	6.7	0.84	33	78.1
UE03-56-0.5	56	0.5	E	6.3	0.7	35.2	101
UE03-56-1.0	56	1.0	E	5.8	0.65	36.9	93.2
UE04-29-0.5	29	0.5	E	89.9	10.9	2080	1990
UE04-29-1.0	29	1.0	E	89.8	9.7	2030	1800
UE05-56-0.5	56	0.5	E	19.1	16.2	260	2030
UE05-56-1.0	56	1.0	E	16.9	4.7	389	810
UE05-56A1-0.5	56A1	0.5	E	8.2	0.83	49.8	122
UE05-56A1-1.0	56A1	1.0	E	7.5	0.77	43.8	114
UE06-64A-0.5	64A	0.5	E	7.6	1.1	79.7	197
UE06-64A-1.0	64A	1.0	E	7.4	1	74	181
UE06-CNTY-0.5	27BX	0.5	E	52.7	6	1030	927
UE06-CNTY-1.0	27BX	1.0	E	58.7	5.7	1140	854
UE07-28A1X-0.5	28A1X	0.5	E	84.6	9.2	788	1500
UE07-28A1X-1.0	28A1X	1.0	E	89.7	12.1	1250	1610
UE07-50-0.5	50	0.5	E	11.3	1.9	87	346
UE07-50-1.0	50	1.0	E	8.7	1	50.3	117
UE07-56-0.5	56	0.5	E	11.2	1.4	108	232
UE07-56-1.0	56	1.0	E	13.3	1.4	130	239
UE08-28-0.5	28	0.5	E	5.7	0.6	29.5	80.7
UE08-28-1.0	28	1.0	E	10.2	1.9	101	188
UE08-28A1X-0.5	28A1X	0.5	E	15.4	3.7	305	496
UE08-28A1X-1.0	28A1X	1.0	E	6.6	1	32.6	137
UE08-56-0.5	56	0.5	E	28.9	5.3	616	1070
UE08-56-1.0	56	1.0	E	14.2	2.2	253	448
UE11-27-0.5	27	0.5	E	6.4	0.42	17.9	51.3
UE11-27-1.0	27	1.0	E	6	0.38	16.4	51.3
UE12-28A1X-0.5	28A1X	0.5	E	50.5	5.6	996	1120
UE12-28A1X-1.0	28A1X	1.0	E	62.5	6.7	1300	1300
UE13-CNTY-0.5	27BX	0.5	E	17.8	1.8	253	288
UE13-CNTY-1.0	27BX	1.0	E	21.6	2.3	334	328
UE14-50-0.5	50	0.5	E	16.9	3.2	218	706
UE14-50-1.0	50	1.0	E	17.7	3.5	345	809
UE18-CNTY-0.5	51BX	0.5	E	17.6	2.1	217	334
UE18-CNTY-1.0	51BX	1.0	E	11.9	1.3	97.7	184
UE21-50-0.5	50	0.5	E	21.6	3.8	406	466
UE21-50-1.0	50	1.0	E	20.3	4.1	376	448
UE22-27-0.5	27	0.5	E	5	0.51	32.9	109
UE22-27-1.0	27	1.0	E	4.9	0.41	19.3	77.8
UE22-CNTY-0.5	51C2X	0.5	E	57	7.3	889	1160
UE22-CNTY-1.0	51C2X	1.0	E	32	3.7	469	590
UE23-50-0.5	50	0.5	E	13.3	1.9	163	345
UE23-50-1.0	50	1.0	E	8.2	0.94	51.7	134
UW01-56A1-0.5	56A1	0.5	W	5.2	0.42	22.3	45.9
UW01-56A1-1.0	56A1	1.0	W	5.3	0.47	24.7	52.9
UW03-47-0.5	47	0.5	W	8.9	1.1	120	181

**Table 2b**  
**Phase II Subsurface Sample Results**  
**Lower Silver Creek, Utah**

Sample ID	Parcel ID	Sample Depth	East or West	Arsenic (mg/kg)	Cadmium (mg/kg)	Lead (mg/kg)	Zinc (mg/kg)
<b>Applicable Criteria</b>	<b>Region 9 PRG: Residential Soil</b>			<b>0.39</b>	<b>37</b>	<b>400</b>	<b>23000</b>
<b>Applicable Criteria</b>	<b>Region 9 PRG: Industrial Soil</b>			<b>2</b>	<b>450</b>	<b>800</b>	<b>100000</b>
UW03-47-1.0	47	1.0	W	8.1	0.94	94.7	147
UW03-56-0.5	56	0.5	W	62.8	36.2	2480	3020
UW03-56-1.0	56	1.0	W	8.1	1.3	99.7	189
UW04-29-0.5	29	0.5	W	4.3	0.47	28.5	66
UW04-29-1.0	29	1.0	W	3.3	0.36	14.6	55.1
UW04-56A1-0.5	56A1	0.5	W	7.1	0.54	69.1	84.5
UW04-56A1-1.0	56A1	1.0	W	7.3	1.1	85.2	165
UW09-56A1-0.5	56A1	0.5	W	6.6	0.73	37.2	91.3
UW09-56A1-1.0	56A1	1.0	W	5.3	0.63	23	78.8
UW15-56A1-0.5	56A1	0.5	W	745	119	23700	18400
UW15-56A1-1.0	56A1	1.0	W	681	111	26200	18700
UW29-47-0.5	47	0.5	W	8.8	0.83	46.7	109
UW29-47-1.0	47	1.0	W	7.7	0.65	28.5	90.6

Note

1) Samples were analyzed by Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) and/or Inductively Coupled Plasma-Mass Spectrometry (ICP-MS).

2) Data for all samples taken at each subsurface sample location are shown, including surface samples.

**Table 2c**  
**Phase II Test Pit Sampling Results**  
**Lower Silver Creek, Utah**

Test Pit	Parcel	Depth (feet)	Layer	Arsenic (mg/kg)	Cadmium (mg/kg)	Lead (mg/kg)	Zinc (mg/kg)
<b>Applicable Criteria</b>		<b>Region 9 PRG: Residential Soil</b>		<b>0.39</b>	<b>37</b>	<b>400</b>	<b>23000</b>
<b>Applicable Criteria</b>		<b>Region 9 PRG: Industrial Soil</b>		<b>2</b>	<b>450</b>	<b>800</b>	<b>100000</b>
TP-4	SS-28-A-X	1.5	Tailing	468	59.6	5250	10800
TP-4	SS-28-A-X	3-4	Black Clay	44	4.8	189	500
TP-5	SS-28-A-X	1.5	Tailing	277	45.9	4720	7290
TP-5	SS-28-A-X	3	Black Clay	29	2.8	212	722
TP-19	SS-28-A-X	1.5	Tailing	695	116	25500	25100
TP-19	SS-28-A-X	3.5	Tailing	1290	598	29300	107000
TP-1	SS-29	1.5	Tailing	118	29.2	2760	8360
TP-1	SS-29	2.5	Tailing	182	45.3	3490	8360
TP-2	SS-29	2.5	Tailing	261	41	3430	8060
TP-3	SS-29	2.5	Tailing	292	66.2	4490	15100
TP-3	SS-29	3.5	Tailing	1280	221	27000	39900
TP-6	SS-44	1-2	Tailing	187	42.3	3700	10200
TP-7	SS-44	2	Tailing	517	83.1	14300	16000
TP-7	SS-44	3.5	Tailing	297	55.9	4470	11000
TP-8	SS-44			NS	NS	NS	NS
TP-9	SS-44	2.5-3	Tailing	338	74.2	8340	14400
TP-10	SS-44			NS	NS	NS	NS
TP-18	SS-44	0.5-1	Tailing	490	155	15100	30600
TP-18	SS-44	0-0.5	Peet	736	101	1060	8210
TP-20	SS-44	0.5-1	Tailing	258	38	4640	7960
TP-17	SS-47	0-1	Tailing	760	330	26300	59600
TP-17	SS-47	1-2.5	Black Clay	7	0.8	30	214
TP-17	SS-47	2.5-4	Sandy Gravel	9	0.9	148	207
TP-11	SS-56	0-2	Tailing	322	87.3	7280	15300
TP-11	SS-56	2.5-3	Sandy Gravel	38	24.9	185	1310
TP-11	SS-56	2-2.5	Sandy Silt	855	144	27000	31500
TP-12	SS-56	1-2	Tailing	721	117	15300	24700
TP-12	SS-56	2.5-3	Black Clay	43	24.9	60	2160
TP-16	SS-56			NS	NS	NS	NS
TP-21	SS-56-A-1	0-1	Tailing	541	87.8	8630	16500
TP-22	SS-56-A-1	0.5-1	Black Clay	21	3.1	153	502
TP-22	SS-56-A-1	0-0.5	Tailing	352	52.9	7990	10200
TP-13	SS-64-A	3	Black Clay	11	1.2	23	159
TP-13	SS-64-A	0-1	Topsoil	53	5.8	1280	1500
TP-13	SS-64-A	1-2.7	Sandy Gravel	8	U	27	132
TP-14	SS-64-A	1-2	Black Clay	9	1.2	35	163
TP-14	SS-64-A	0-0.5	Topsoil	747	106	18400	28000
TP-15	SS-64-A	1-3	Sandy Gravel	U	0.6	22	200
TP-15	SS-64-A	0-0.5	Topsoil	21	15.7	632	2450

**Legend**

U: Value not detected above the Practical Quantitation Limit

NS: Not Sampled

**Note**

1) Samples were analyzed by Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) and/or Inductively Coupled Plasma-Mass Spectrometry (ICP-MS).

2) Data for all samples taken at each subsurface sample location are shown, including surface samples.

**Table 3a**  
**Phase I Groundwater Sample Results**  
**Lower Silver Creek, Utah**

Sample ID	Parcel	Screened Interval	Sample Date	Depth to Water	Arsenic ug/L RL 1 ug/L	Cadmium ug/L RL 1 ug/L	Lead ug/L RL 1 ug/L	Zinc ug/L RL 2 ug/L	Depth to Base of Tailings	Screened in tailings?	pH	conductivity (uS at 25 deg C)	T (deg C)		
GW1E0125	SS-64-1000-UP-X	5' - 10'	08/16/2007	2.3	22.2		14.3	3.6	224	5.5	YES	6.1	2480	16.7	
GW1W0125	SS-65-A-3	5' - 10'	08/16/2007	2.3	32.7		1.9	11.3	453	8	YES	6.44	3001	21	
GW2E0125	SS-56-A-1	5' - 10'	08/16/2007	7.5	4.9	1	U	4.2	96	1	NO	6.39	1829	17.4	
GW2E0625	SS-56-UP-X	5' - 10'	08/16/2007	6.9	5.7		1.1	117	174	5	NO	6.84	1534	17	
GW2W0125	SS-56-A-1	5' - 10'	08/16/2007	4.5	7.5	1	U	7.9	27.1	2.5	NO	6.56	754	17.7	
GW2W0375	SS-56-A-1	5' - 10'	08/16/2007	DRY AT 10.98TD	NS		NS		NS	1.5	NO	NA	NA	NA	
GW3E0125	SS-50	5' - 10'	08/16/2007	3.7	5.9	1	U	0.29	J	10.4	1	NO	6.52	1861	17.7
GW3E0625	SS-50	5' - 10'	08/16/2007	DRY AT 11.13TD	NS		NS		NS	1.5	NO	NA	NA	NA	
GW3E1125	SS-50	5' - 10'	08/16/2007	5.0	4.4	1	U	1	U	9	3.5	NO	6.69	1667	20.5
GW3W0375	SS-50	5' - 10'	08/16/2007	DRY AT 11.13TD	NS		NS		NS	2	NO	NA	NA	NA	
GW4E0375	SS-44	5' - 10'	08/16/2007	3.8	20		1	U	12.4	113	1.5	NO	5.85	2500	16
GW4E0875	SS-51-A	5' - 10'	08/16/2007	3.1	9.6	0.79	J	67	72.6	2	NO	6.13	1646	15.5	
GW4E1375	SS-51-C-2-X	5' - 10'	08/16/2007	DRY AT 10.83TD	NS		NS		NS	2	NO	NA	NA	NA	
GW5E0875	SS-44	5' - 10'	08/15/2007	7.0	NS		NS		NS	4	NO	NA	NA	NA	
GW5E1375	SS-44	5' - 10'	08/15/2007	3.7	1.5	0.46	J	1.5	18.6	2	NO	6.33	1111	20.7	
GW5E1875	SS-51-UP-X	5' - 10'	08/15/2007	8.6	1.9	0.6	J	0.33	J	13.3	3	NO	6.6	1333	22.5
GW5W0125	SS-44	5' - 10'	08/15/2007	1.6	5.8	1	U	19.8	72.1	3	NO	7.15	350	15.8	
GW6E0375	SS-29	5' - 10'	08/15/2007	8.1	2.9	1	U	2.5	24.8	2.5	NO	NA	NA	NA	
GW6E1350	SS-28-A-1-X	5' - 10'	08/15/2007	0.0	5.5	1	U	1	U	13.3	2.5	NO	7.3	1226	15
GW6W0175	SS-28-A-X	5' - 10'	08/15/2007	4.4	327		15.5	1430	55900	7	YES	6.65	1796	17.1	
GW6W0625	SS-28-A-X	5' - 10'	08/15/2007	3.4	20.7		0.64	J	77.4	179	5	NO	NA	NA	NA

**Legend**

J: Value reported is either an estimated value which is below the sample-specific detection limit or is considered approximate due to limitations identified in the data validation review (laboratory or data validation qualifier).

U: Value not detected above the Practical Quantitation Limit

NS: Not Sampled

ug/L: Micrograms Per Liter

ft bgs: Feet below ground surface

**Note**

1) Samples were analyzed by Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) and/or Inductively Coupled Plasma-Mass Spectrometry (ICP-MS).

**Table 3b**  
**Phase II Groundwater Sample Results**  
**Lower Silver Creek, Utah**

Sample ID	Parcel	Screened Interval	Sample Date	Depth to Water (ft below TOC)	Arsenic (ug/L) RL 10 ug/L	Cadmium (ug/L) RL 5 ug/L	Lead (ug/L) RL 10 ug/L	Zinc (ug/L) RL 60 ug/L	Lab Qual	Depth to Base of Tailings	Screened in tailings?	conductivity (uS at 25 deg C)	pH	T (deg C)
P2-1 (A)	SS-28-A-X	6' - 11'	11/19/2007	4.2	235	8.6	2380	1760		3.5	NO	7.64	2050	12
P2-1(B)	SS-28-A-X	2' - 4'	11/19/2007	3.5	NS	NS	NS	NS		3.5	YES	NA	NA	NA
P2-2 (A)	SS-44	7' - 12'	11/19/2007	4.6	47.4	3.8	J	61.2		6	NO	7.24	1519	13.9
P2-2 (B)	SS-44	1.5' - 4.5'	11/19/2007	4.2	7.8	J	547	413		4.5	YES	7.47	3096	13
P2-3 (A)	SS-44	5' - 10'	11/19/2007	5.1	49.5	5	U	42.7		3	NO	7.75	1795	13.1
P2-3(B)	SS-44	2' - 3'	11/19/2007	DRY	NS	NS	NS	NS		3	YES	NA	NA	NA
P2-4	SS-47	5' - 10'	11/19/2007	4.6	125	5.9	698	3280		3.5	NO	7.51	2563	11.2
P2-5	SS-29	3' - 6'	11/19/2007	3.8	363	190	31900	23200		5	YES	7.89	624	9.3

Legend

J: Value reported is either an estimated value which is below the sample-specific detection limit or is considered approximate due to limitations identified in the data validation review (laboratory or data validation qualifier).

U: Value not detected above the Practical Quantitation Limit

NS: Not Sampled

ug/L: Micrograms Per Liter

ft below TOC: Feet below top of casing

Note

1) Samples were analyzed by Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) and/or Inductively Coupled Plasma-Mass Spectrometry (ICP-MS).

**Table 4**  
**Surface Water Sampling Results**  
**Lower Silver Creek, Utah**

Data Shown on Figure	Sample ID	Source	Description	Date	Discharge (cfs)	Arsenic (ug/L) <sup>(1)</sup>	Cadmium (ug/L) <sup>(1)</sup>	Lead (ug/L) <sup>(1)</sup>	Zinc (ug/L) <sup>(1)</sup>
		Applicable Criteria	UDEQ Rule 317-2 <sup>(2)</sup>			NA	0.6	11	380
No	SQ1-0000	S	T0 Upper - Injection site below US Highway 40 bridge	4/15/2004	1.88	2.13	2.69	1.62	1300
No	SQ1-0061	LBI	Discharge with iron staining from willows	4/15/2004	NC	1.98	.24	0.347	8800
No	SQ1-0101	S	Upstream from "flood plain tailings"	4/15/2004	1.88	1.97	2.66	0.813	1340
No	SQ1-0250	S	Midway along the tailings in the left bank	4/15/2004	1.88	1.95	2.83	1.36	1410
No	SQ1-0428A	S	T1 Upper - Upstream from Richardson Flat tailings influence	4/15/2004	1.88	1.99	4.22	2.09	1620
No	SQ1-0428B	S	T1 Upper - Upstream from Richardson Flat tailings influence	4/15/2004	1.88	2.06	4.08	2.13	1680
Yes	SQ1-0525	S	Upstream from pond area and bridge	4/15/2004	1.88	2.04	4.09	1.87	1620
No	SQ1-0625	LBI	Pace-Homer ditch inflow; left of bridge	4/15/2004	NC	2.21	3.48	4.38	1690
No	SQ1-0681	LBI	Small ditch upstream from highway	4/15/2004	NC	4.38	0.09	0.16	204
No	SQ1-0682	LBI	Black pipe spewing orange floc source unknown	4/15/2004	NC	9.75	3.54	0.835	5110
Yes	SQ1-0731	S	Downstream end of left, Smaller culvert at highway	4/15/2004	NC	2.58	2.89	0.948	1510
No	SQ1-0757	LBI	Ditch downstream from highway	4/15/2004	NC	2.46	2.72	1.04	1390
No	SQ1-0770	LBI	Draining ditch on downstream side of highway	4/15/2004	NC	1.96	1.42	3.06	352
Yes	SQ1-0861	S	Right channel - downstream end of larger culvert at highway	4/15/2004	NC	2.28	0.81	0.501	932
Yes	SQ1-1050	RBI	Right channel - ditch from area of Richardson Flat	4/15/2004	NC	7.5	0.54	0.269	757
Yes	SQ1-1095	S	Upstream end of culvert under rail trail	4/15/2004	NC	2.8	2.89	1.32	1560
No	SQ1-1148	RBI	Right channel - second ditch from area of Richardson Flat	4/15/2004	NC	3.43	9.66	17.2	2160
Yes	SQ1-1229	S	Right channel - downstream from small pond in channel	4/15/2004	NC	3.13	0.76	0.539	1010
Yes	SQ1-1235	RBI	Channel draining meadow area	4/15/2004	NC	0.54	77.1	0.922	25500
No	SQ1-1300	S	Upstream from return of irr ditch	4/15/2004	NC	2.65	4.88	2.03	1950
Yes	SQ1-1309	RBI	T2 Upper - Right channel - returning ditch	4/15/2004	NC	3.1	0.64	0.714	979
Yes	SQ1-1371A	S	At old flume in stream	4/15/2004	2.26	2.8	3.45	1.85	1560
No	SQ1-1371B	S	At old flume in stream	4/15/2004	2.26	2.48	3.4	1.67	1570
No	SQ1-1452	S	T3 Upper - At diversion to wetland	4/15/2004	2.36	2.66	3.33	1.61	1690
Yes	SQ2-1601	S	T0 Middle - Injection site downstream from wetland culvert	4/9/2004	2.50	2.7	9.62	1.62	2380
No	SQ2-1744	S	Irrigation ditch b/w culvert near wetland 2002 sample site Middle injection reach	4/15/2004	NM	13.8	28.2	0.736	7120
Yes	SQ2-1843A	S	T1 Middle - At fence at end of wetland	4/9/2004	2.50	2.83	12.7	2.35	2440
No	SQ2-1843B	S	T1 Middle - At fence at end of wetland	4/9/2004	2.50	2.9	12.8	2.92	2380
No	SQ2-1843C	S	T1 Middle - At fence at end of wetland	4/9/2004	2.50	2.9	12.9	3.1	2380
No	SQ2-1959	S	Upstream from tailings inflow - questioned chemistry	4/9/2004	2.50	2.93	0.09	0.51	2470
Yes	SQ2-1965	RBI	Pond at end of long tailings pile	4/9/2004	NC	2.55	1014	892	270000
Yes	SQ2-2048	RBI	Location of several inflows	4/9/2004	NC	1.41	22	0.941	4350
No	SQ2-2118	RBI	Homer Spring inflow to irrigation ditch no input to stream	4/9/2004	NM	2.64	13	2.71	26
Yes	SQ2-2171	S	Downstream from area of right bank inflows	4/9/2004	2.50	1.83	18.8	1.71	3350
Yes	SQ2-2337	S	After braids have come back together	4/9/2004	2.50	2.01	19.4	4.34	3380
No	SQ2-2431	LBI	Drains large area with tailings off to left	4/9/2004	NC	8.99	19.7	3.12	1590
Yes	SQ2-2560	S	Between upstream left bank inflows and downstream right bank inflows	4/9/2004	2.77	1.66	18.9	1.76	3360
No	SQ2-2569	RBI	Drains from tailings pile	4/9/2004	NC	2.1	73.7	35.8	11300
No	SQ2-2678	S	Downstream from tailings inflow to collect inflows	4/9/2004	2.97	1.43	19.9	1.42	3470
No	SQ2-2718	RBI	Pond from tailings drainage	4/9/2004	NC	3.14	40.1	5.26	6110
Yes	SQ2-2730	S	At fence below property corner	4/9/2004	3.05	1.61	21.1	2.45	3580
No	SQ2-2785	S	Downstream from where stream cuts through corner of property	4/9/2004	3.12	1.58	21.5	1.49	3590
No	SQ2-2780	RBI	Direct drainage from tailings pile with Ulothrix	4/9/2004	NC	3.17	29.1	1.6	4690
No	SQ2-2810	S	At old skull in stream	4/9/2004	3.17	1.59	21.4	1.54	3740
No	SQ2-3027	LBI	Drains flat area no tailings piles visible	4/9/2004	NC	8.71	26	3.1	3320
Yes	SQ2-3045	RBI	Draining from tailings piles	4/9/2004	NC	4.67	32.2	2.54	4840
Yes	SQ2-3254A	S	T2 Middle - Upstream from old tree	4/9/2004	3.40	1.95	23.2	1.62	4230
No	SQ2-3254B	S	T2 Middle - Upstream from old tree	4/9/2004	3.40	1.85	22.6	1.79	3840
No	SQ2-3379	S	Downstream from area where stream is ponded	4/9/2004	3.46	1.82	22.8	1.77	3960
No	SQ2-3598	RBI	Small pool on right bank; sample puddle	4/9/2004	NC	2.08	155	4.31	24400

**Table 4**  
**Surface Water Sampling Results**  
**Lower Silver Creek, Utah**

Data Shown on Figure	Sample ID	Source	Description	Date	Discharge (cfs)	Arsenic (ug/L) <sup>(1)</sup>	Cadmium (ug/L) <sup>(1)</sup>	Lead (ug/L) <sup>(1)</sup>	Zinc (ug/L) <sup>(1)</sup>
	Applicable Criteria	UDEQ Rule 317-2 <sup>(2)</sup>				NA	0.6	11	380
Yes	SQ2-3602	LBI	Drains tailings to left of stream	4/9/2004	NC	5.66	62.8	13.7	11300
Yes	SQ2-3784A	S	Upstream from point where flow disperses made a new diversion to right	4/9/2004	3.53	1.94	24.3	1.62	4150
No	SQ2-3784B	S	Upstream from point where flow disperses; made a new diversion to right	4/9/2004	3.53	1.84	24.6	1.7	4200
No	SQ2-4000	RBI	Inflow from natural channel; ditch from left of rail trail; strm water	4/9/2004	NC	4.37	26.7	6.74	4840
Yes	SQ2-4050	S	Location to check with discharge measurement and Br	4/9/2004	3.74	2.81	25.8	2.73	4390
Yes	SQ2-4286	S	After gathering back together into channel; could be irrigation ditch	4/9/2004	4.10	2.82	25.7	3.17	4250
No	SQ2-4292	LBI	Draining area where stream dispersd	4/9/2004	NC	9.41	60.6	13.5	8400
No	SQ2-0054	LBI	Draining wide area to left of stream	4/9/2004	NC	18.2	23.4	4.74	2600
No	SQ2-0061	S	Downstream from gathered dispersion	4/9/2004	4.31	3.31	26.3	3.75	4250
Yes	SQ2-0080	S	Downstream from area where stream is ponded	4/9/2004	4.70	6.59	23.4	2.85	3450
No	SQ2-0096	RBI	Drainage has some flow to stream; tailings in soil to right	4/9/2004	NC	6.77	38.4	6.13	8380
Yes	SQ2-0100	S	Downstream from possible tailings inflow	4/9/2004	5.05	7.33	27.3	4.12	4460
No	SQ2-0108	RBI	Orange stained inflow	4/9/2004	NC	6.7	4.74	0.574	3440
Yes	SQ2-0109	RBI	Draining tailings	4/9/2004	NC	3.47	188	7.7	53400
No	SQ2-0149	RBI	Sample away from stream water not draining to stream	4/9/2004	NC	16.5	2038	104	1070000
Yes	SQ2-0113	S	Upstream from many tailings mounds	4/9/2004	5.12	6.75	28.5	3	5140
No	SQ2-0120	RBI	Draining tailings maybe from storm orange plume	4/9/2004	NC	20.3	562	539	132000
No	SQ2-0122	S	To account for inflows and separate tailings below	4/9/2004	5.16	5.11	30.7	3.31	5600
Yes	SQ2-0135	S	T3 Middle - Upstream from pond above Promontory Road	4/9/2004	5.19	4.55	31.8	2.04	6110
No	SQ2-0137	RBI	Orange inflow farther right	4/9/2004	NC	7.53	151	4.61	45300
Yes	SQ3-005	S	T0 Lower - Injection site downstream from Promontory culvert	4/6/2004	1.90	4.26	38.1	2.83	6800
No	SQ3-008	S	First site downstream from injection for discharge	4/6/2004	1.90	4.33	38.7	3.02	6800
No	SQ3-008	S	First site downstream from injection for discharge	4/6/2004	1.90	10.1	39.1	35.1	7130
Yes	SQ3-010	RBI	Draining tailings toward old "Big 4" mill site	4/6/2004	NC	2.71	183	5.85	30100
No	SQ3-010	RBI	Draining tailings toward old "Big 4" mill site	4/6/2004	NC	4.31	190	15.8	30000
No	SQ3-012	S	T1 Lower - Downstream from first tailings inflow	4/6/2004	1.90	4.54	37	3.3	6730
No	SQ2-0005	S	End of middle injection reach Lower injection reach	4/9/2004	6.25	4.3	34.5	3.26	6890
No	SQ3-018	S	To capture right bank inflows	4/6/2004	1.97	4.55	38.9	3.55	6890
No	SQ3-024	RBI	Ponds along berm line to east	4/6/2004	NC	5.15	117	76.9	26300
Yes	SQ3-025	LBI	Draing from pond toward BFI Disposal land	4/6/2004	NC	2.9	224	15.1	44800
Yes	SQ3-032	S	To capture both inflow upstream	4/6/2004	2.02	4.45	41	34.7	7510
No	SQ3-032	S	To capture both inflow upstream	4/6/2004	2.02	9.92	38	3.37	7370
No	SQ3-039	S	Upstream from inflow from marsh draining along fence	4/6/2004	2.04	4.47	40.3	3.57	7930
No	SQ3-042	LBI	Draining from marsh area along much of BFI land	4/6/2004	NC	4.42	7.27	0.84	8740
No	SQ3-048	S	Downstream from inflow along fence	4/6/2004	2.12	4.6	40.5	3.78	7880
Yes	SQ3-056	S	Downstream from area where stream is ponded	4/6/2004	2.15	4.45	42.8	3.75	8420
No	SQ3-060	LBI	Draining tailings toward old mill site pool away from stream	4/6/2004	NC	3.82	462	100	117000
No	SQ3-060	LBI	Draining tailings toward old mill site pool away from stream	4/6/2004	NC	4.02	478	103	117000
No	SQ3-066	S	Near right bank talings in flood plain	4/6/2004	2.15	4.46	40.9	3.82	8420
No	SQ3-083	RBI	Small unconnected pools along ditch	4/6/2004		9.7	134	33.2	25200
Yes	SQ3-097	S	Downstream from tailings inflows on both sides of stream	4/6/2004	2.15	4.43	42.9	4.49	8420
No	SQ3-115	RBI	Pond on right bank away from stream	4/6/2004	NC	17.9	16.9	1.17	9150
Yes	SQ3-121	LBI	Draining in small grassy channel	4/6/2004	NC	4.37	189	18	46000
Yes	SQ3-127	S	Gathering of the upstream inflows	4/5/2004	2.15	8.95	48.6	7.89	9280
No	SQ3-127	S	Gathering of the upstream inflows	4/5/2004	2.15	4.36	47.5	40	9310
No	SQ3-131	LBI	Pond by waste-water treatment plant	4/6/2004	NC	7.16	31.4	13.9	14800
No	SQ3-140	S	T2 Lower - Upstream from waste-water treatment plant inflow	4/6/2004	2.15	4.29	46.7	7.73	9040
No	SQ3-141	LBI	Discharge from waste-water treatment plant	4/6/2004	NC	4.86	0.81	2.59	357
No	SQ3-142	RBI	Drains area to right including pond	4/6/2004	NC	9.24	1.35	0.366	765
Yes	SQ3-145	S	Stream below gage and waste-water treatment plant inflow	4/5/2004	3.40	4.84	27.1	31.1	5390

**Table 4**  
**Surface Water Sampling Results**  
**Lower Silver Creek, Utah**

Data Shown on Figure	Sample ID	Source	Description	Date	Discharge (cfs)	Arsenic (ug/L) <sup>(1)</sup>	Cadmium (ug/L) <sup>(1)</sup>	Lead (ug/L) <sup>(1)</sup>	Zinc (ug/L) <sup>(1)</sup>
		<b>Applicable Criteria</b>	<b>UDEQ Rule 317-2 <sup>(2)</sup></b>			NA	0.6	11	380
No	SQ3-145	S	Stream below gage and waste-water treatment plant inflow	4/5/2004	3.40	7.5	25.3	2.79	4370
Yes	SQ3-172	S	Upstream from irrigation return flow	4/6/2004	3.40	7	27.1	2.6	5100
No	SQ3-173	RBI	Return flow from irrigation ditch through dairy farm	4/6/2004	NC	2.3	0.09	0.297	13
Yes	SQ3-178A	S	Downstream from irrigation return flow	4/6/2004	3.64	11.8	28	98.2	5910
No	SQ3-178A	S	Downstream from irrigation return flow	4/6/2004	3.64	7.07	24.2	2.55	5890
No	SQ3-178B	S	Downstream from irrigation return flow	4/6/2004	3.64	6.91	24.8	2.73	4800
No	SQ3-178B	S	Downstream from irrigation return flow	4/6/2004	3.64	4.88	51.6	7.34	10600
No	SQ3-186	LBI	Discharge from stream on left	4/6/2004	NC	10.3		2.88	178
No	SQ3-189	LBI	Seep inflow of very high conductance	4/6/2004	NC	2.06	0.82	0.849	380
Yes	SQ3-193	S	Downstream from high conductance seeps	4/6/2004	4.06	8.08	24.7	102	5260
No	SQ3-193	S	Downstream from high conductance seeps	4/6/2004	4.06	14.1	21.3	2.92	4270
No	SQ3-194	RBI	Draining dairy farm	4/6/2004	NC	32.4	0.69	3.15	657
Yes	SQ3-196	S	T3 Lower - Downstream from bridge to dairy	4/6/2004	4.27	8.35	19.2	2.23	3900
No	SQ3-196	S	T3 Lower - Downstream from bridge to dairy	4/6/2004	4.27	13.4	22.9	87.8	

**Legend**

S: Stream

RBI: Right Bank Inflow

LBI: Left Bank Inflow

NC: Not Calculated

NM: Not Measured

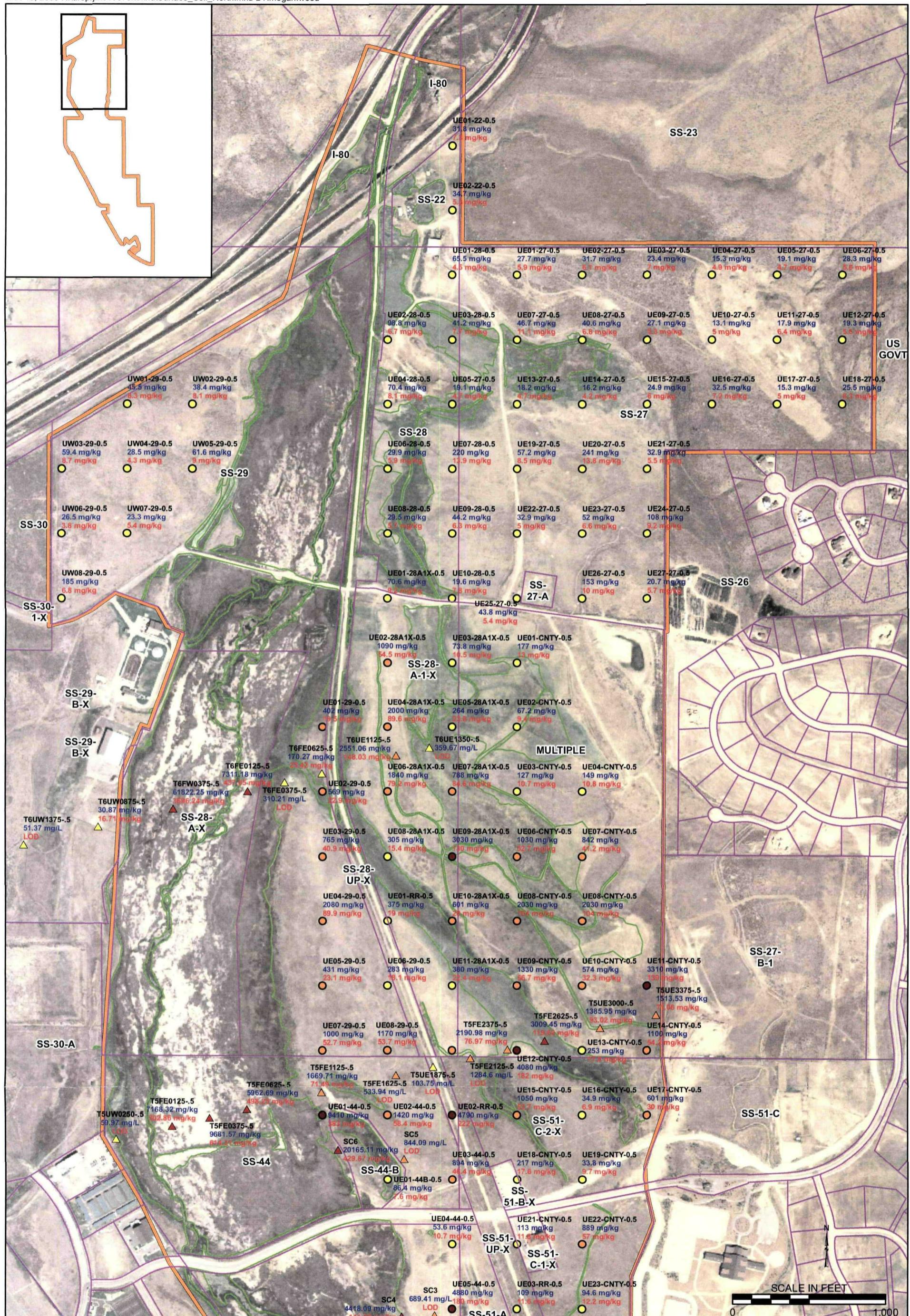
LPS: Liters Per Second

ug/L: Micrograms Per Liter

**Notes**

1) Data presented in figure represents dissolved metals concentrations. Data obtained from the April, 2004 USGS report: Principal Locations of Metal Loading from Floodplain Tailings, Lower Silver Creek, Utah

2) Applicable Criteria determined from the Chronic Water Quality Standard Targets for Aquatic Wildlife for Cadmium, Lead, and Zinc (adjusted for a hardness of 400 mg/L) defined by the Utah Administrative Code Rule R317-2 - Standards of Quality for Waters of the State, Tables 2.14.2 and 2.14.3a, UDEQ-DWQ, 2008.



Note: Phase I samples were analyzed by X-Ray Fluorescence.

Phase II samples were analyzed by Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) and/or Inductively Coupled Plasma-Mass Spectrometry (ICP-MS).

JAN 18, 2008

**FIGURE 1A****Legend**

Phase I Surface Soil Samples

Phase II Surface Soil Samples

Study Boundary

Lead (mg/kg)

Lead (mg/kg)

Parcel Boundaries

13 - 400

&lt; 400

Wetlands Delineation

401 - 3000

400 - 3000

Pb Conc. mg/kg

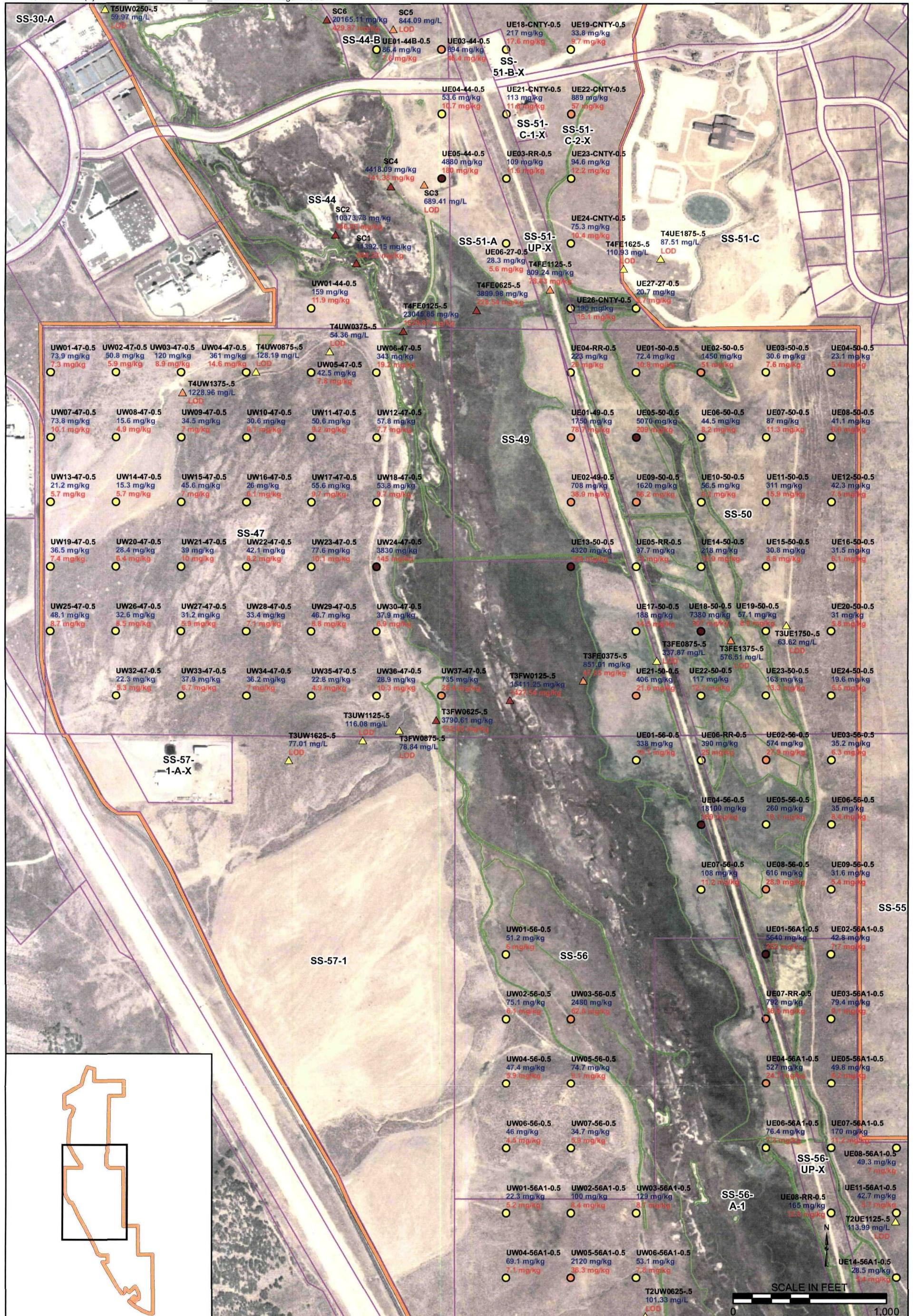
3001 - 63123

&gt; 3000

As Conc. mg/kg

LOD = Not detected above the Limit of Detection

**SURFACE SOIL SAMPLING RESULTS  
SILVER CREEK 010379X**

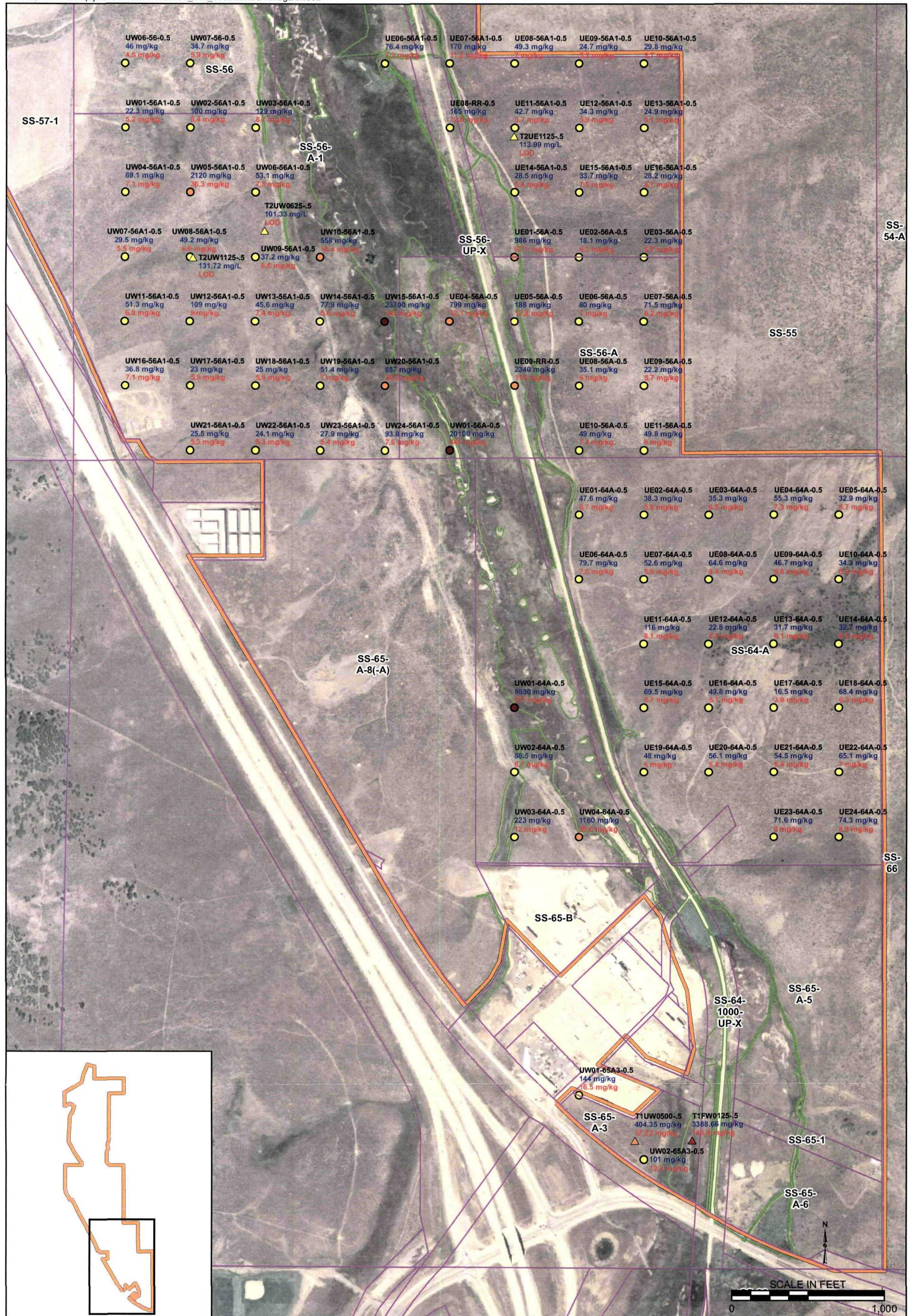


Note: Phase I samples were analyzed by X-Ray Fluorescence.

Phase II samples were analyzed by Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) and/or Inductively Coupled Plasma-Mass Spectrometry (ICP-MS).

JAN 18, 2008

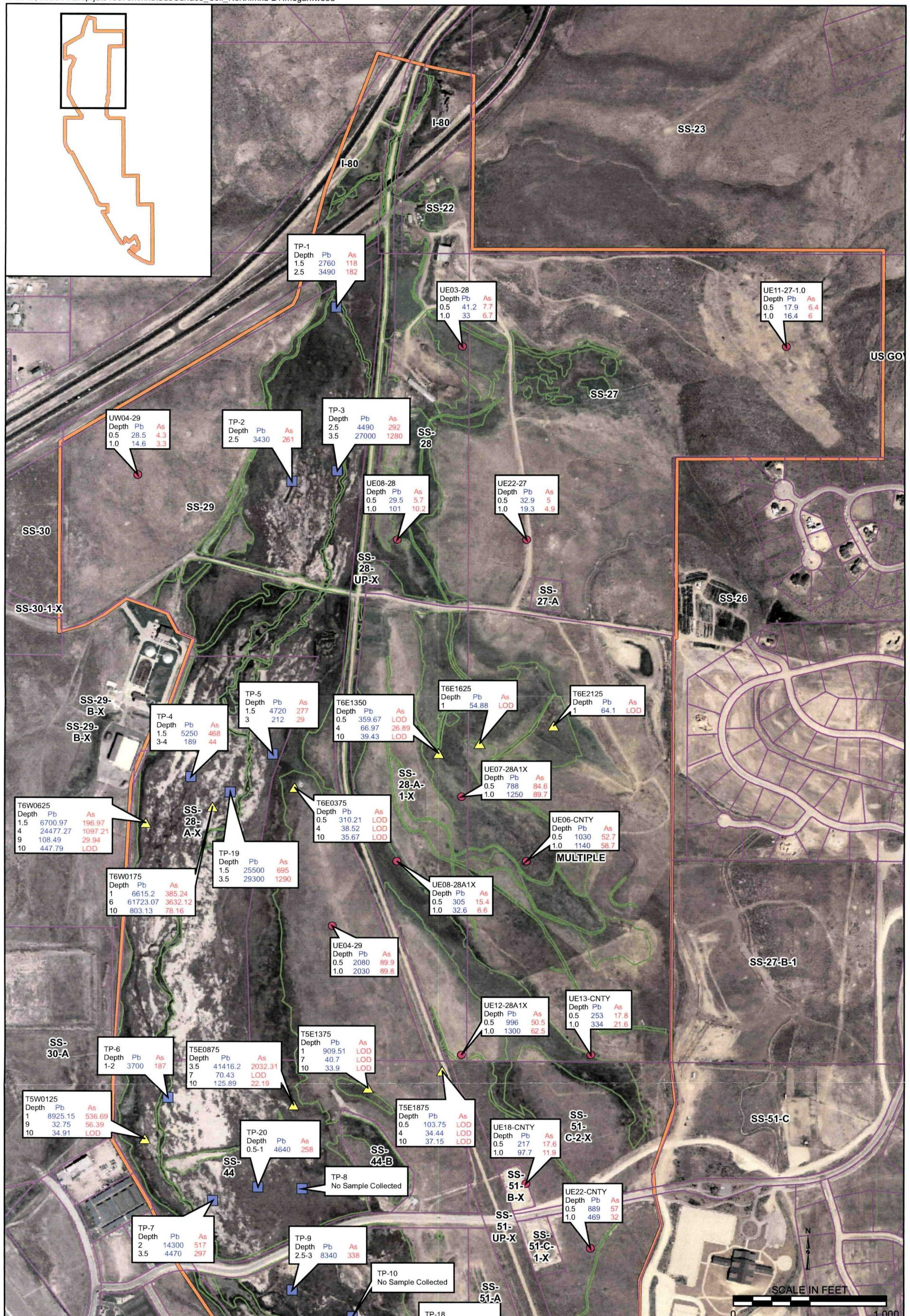
**FIGURE 1B**



JAN 18, 2008

**FIGURE 1C**

LOD = Not detected above the Limit of Detection



Note: Phase I samples were analyzed by X-Ray Fluorescence.

Phase II samples were analyzed by Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) and/or Inductively Coupled Plasma-Mass Spectrometry (ICP-MS).

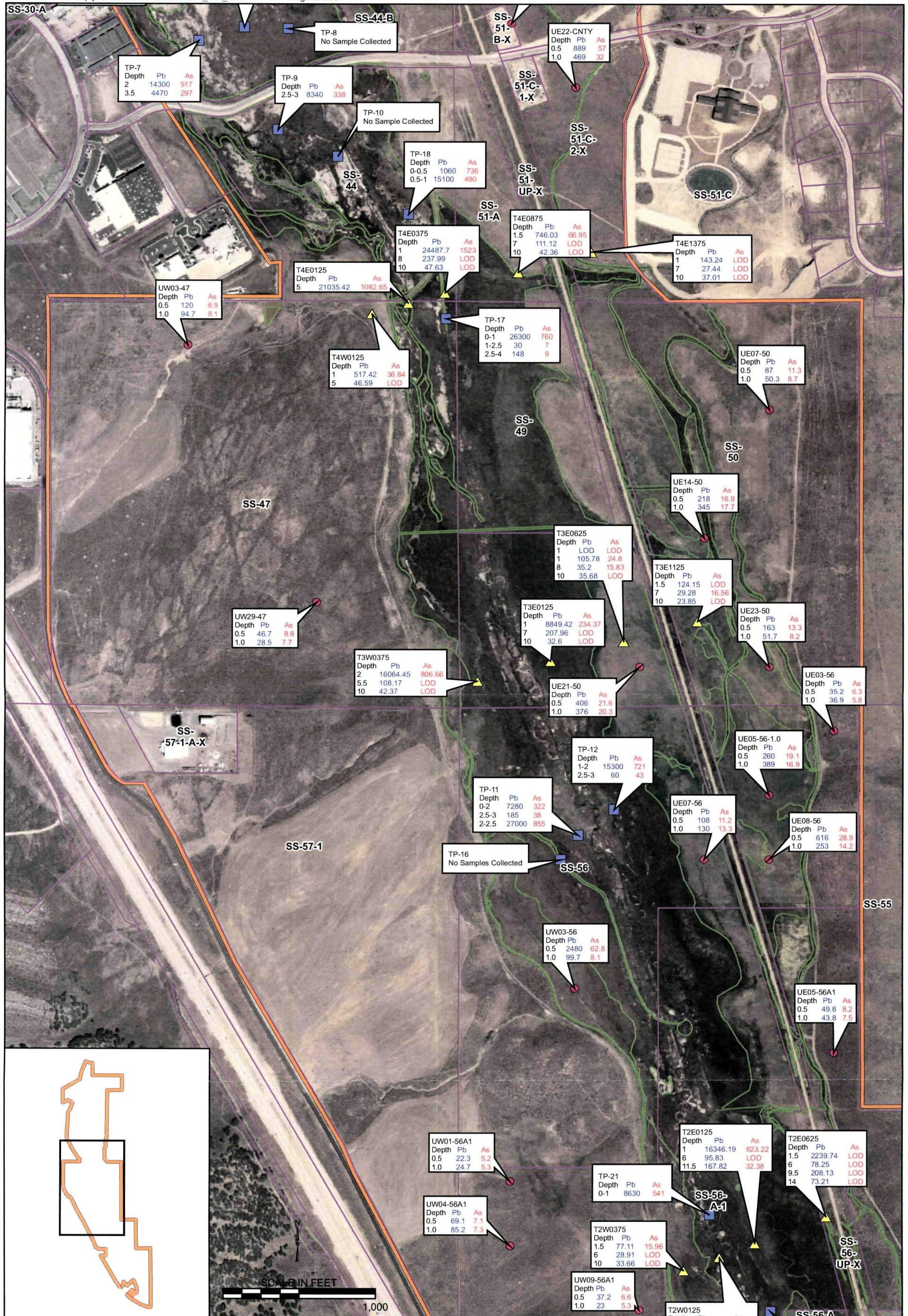
JAN 18, 2008

**FIGURE 2A**

## SUBSURFACE SOIL SAMPLING RESULTS

### SILVER CREEK 010379X

LOD = Not detected above the Limit of Detection  
U = Not detected above the Practical Quantitation Limit



Note: Phase I samples were analyzed by X-Ray Fluorescence.

Phase II samples were analyzed by Inductively Coupled Plasma-Arc Emission Spectroscopy (ICP-AES) and/or Inductively Coupled Plasma-Mass Spectrometry (ICP-MS).

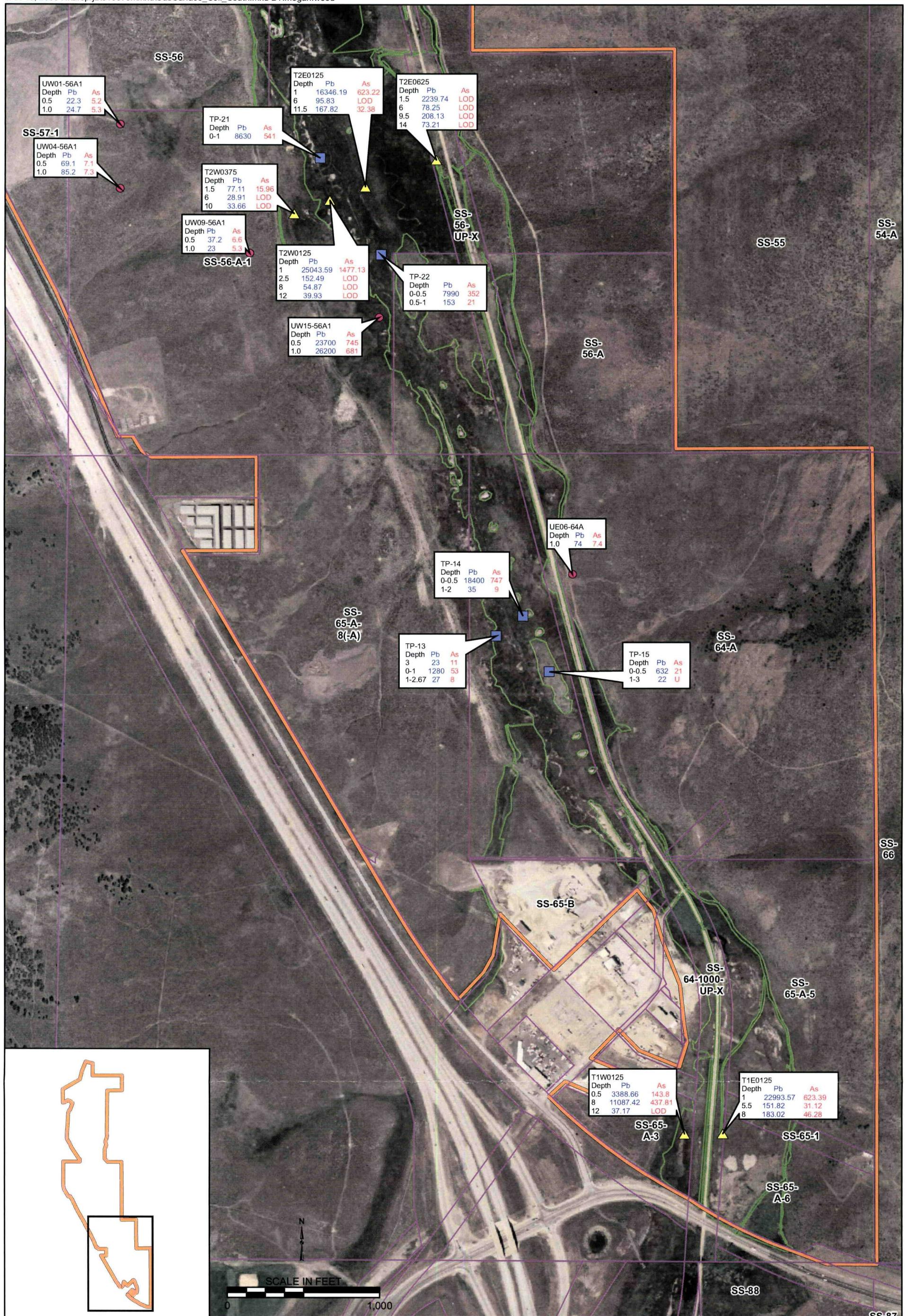
JAN 18, 2008

FIGURE 2B

## SUBSURFACE SOIL SAMPLING RESULTS SILVER CREEK 010379X

LOD = Not detected above the Limit of Detection

U = Not detected above the Practical Quantitation Limit

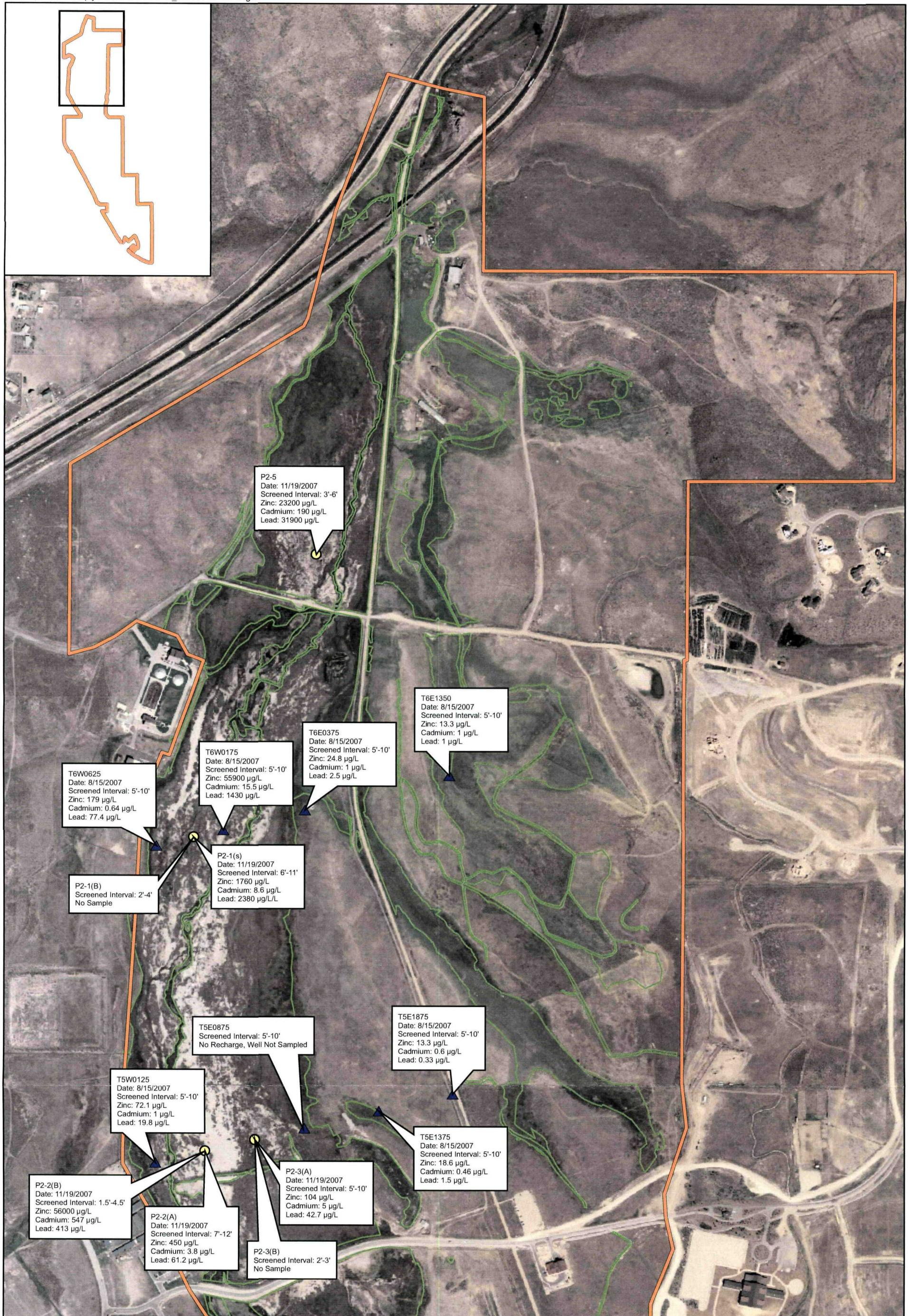


Note: Phase I samples were analyzed by X-Ray Fluorescence.  
Phase II samples were analyzed by Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) and/or Inductively Coupled Plasma-Mass Spectrometry (ICP-MS).

JAN 18, 2008  
**FIGURE 2C**

## SUBSURFACE SOIL SAMPLING RESULTS SILVER CREEK 010379X

LOD = Not detected above the Limit of Detection  
U = Not detected above the Practical Quantitation Limit



Note: All samples were analyzed by Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) and/or Inductively Coupled Plasma-Mass Spectrometry (ICP-MS).

JAN 17, 2008

FIGURE 3A

#### Legend

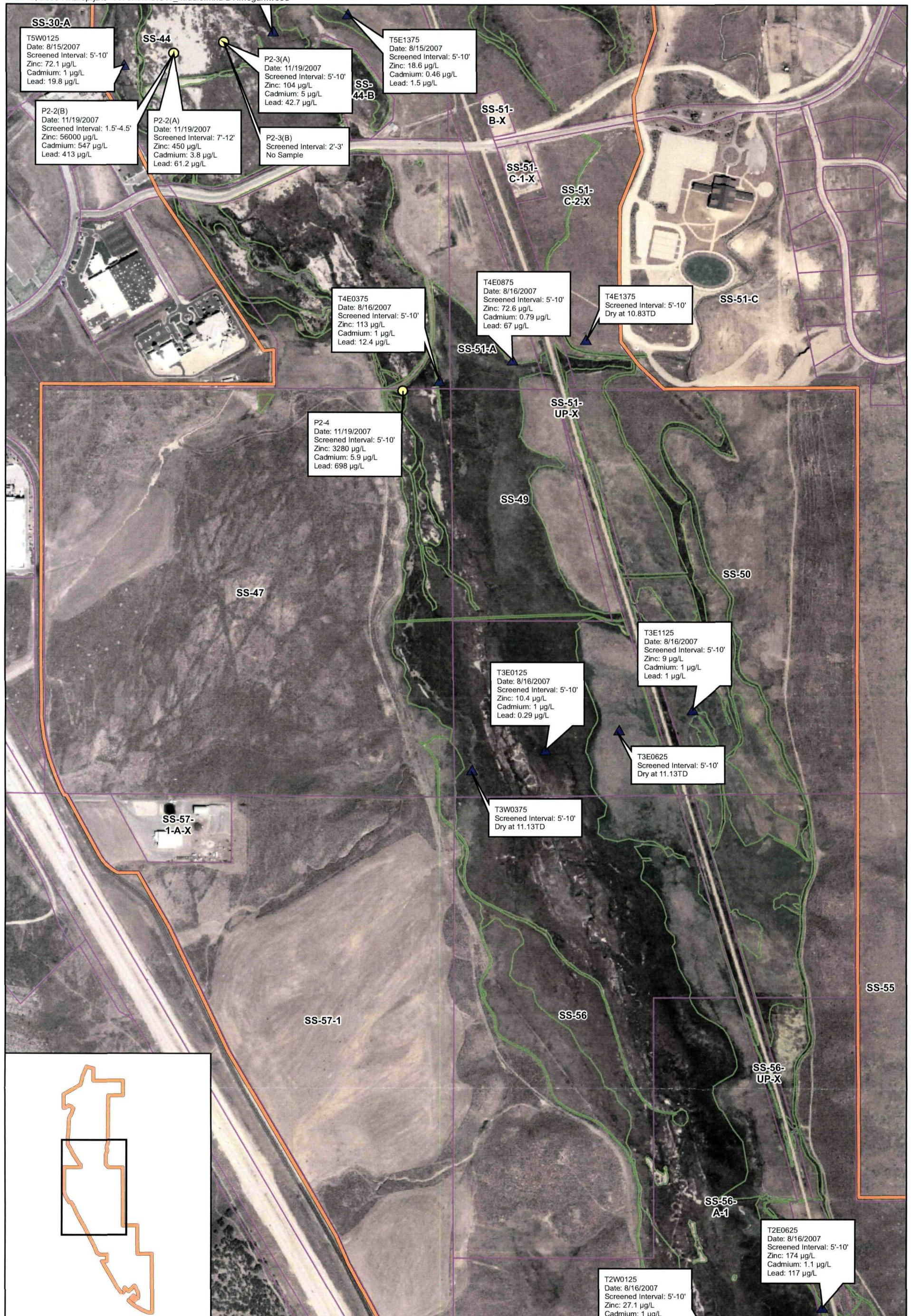
- ▲ Phase I Groundwater Sample Locations
- Phase II Groundwater Sample Locations
- Study Boundary
- Wetlands Delineation



SCALE IN FEET

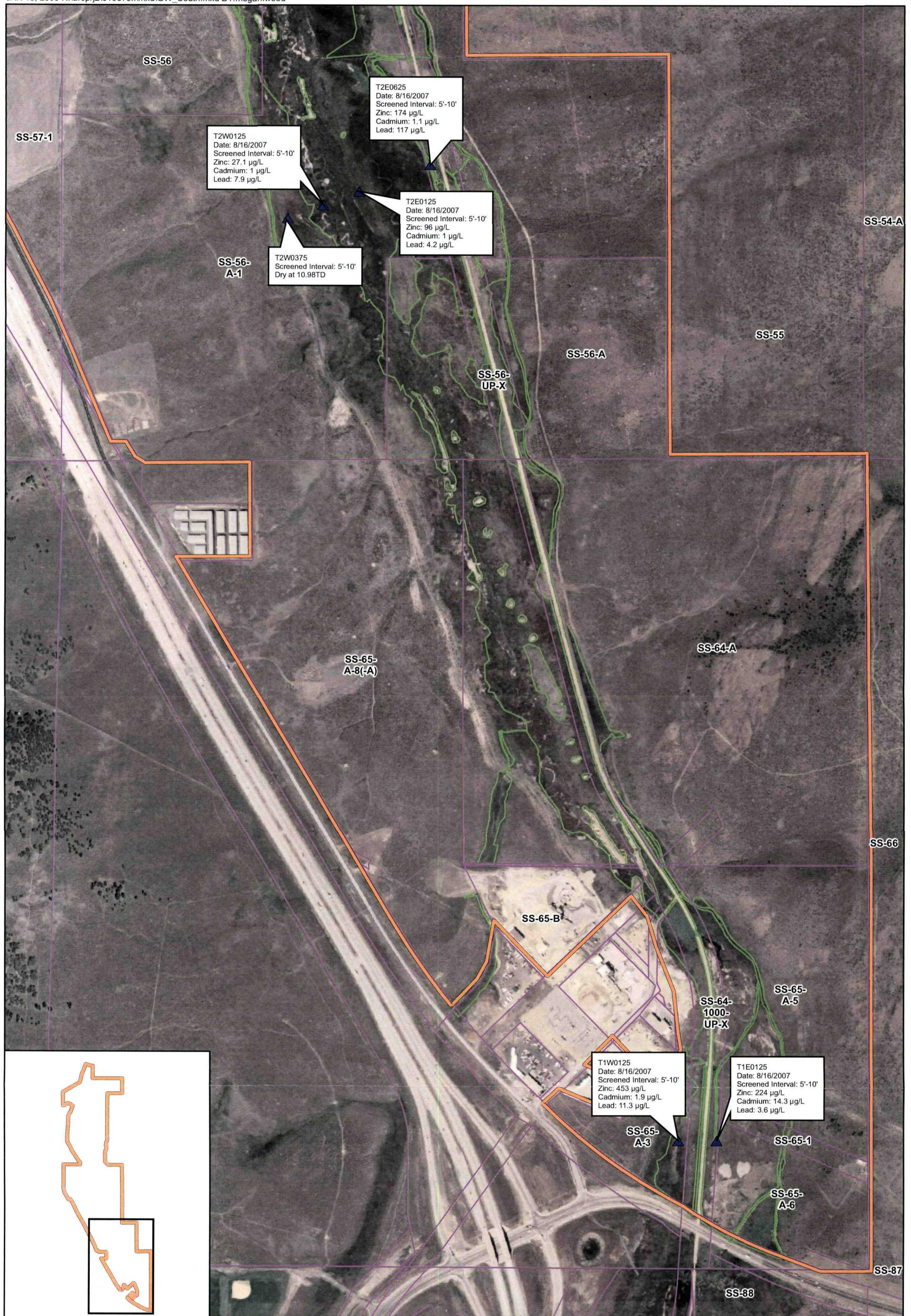
0 1,000

**GROUNDWATER SAMPLING RESULTS**  
**SILVER CREEK 010379X**



JAN 17, 2008

**FIGURE 3B**



Note: All samples were analyzed by Inductively Coupled Plasma-Atomic Emission Spectroscopy (ICP-AES) and/or Inductively Coupled Plasma-Mass Spectrometry (ICP-MS).

JAN 18, 2008

FIGURE 3C



#### Legend

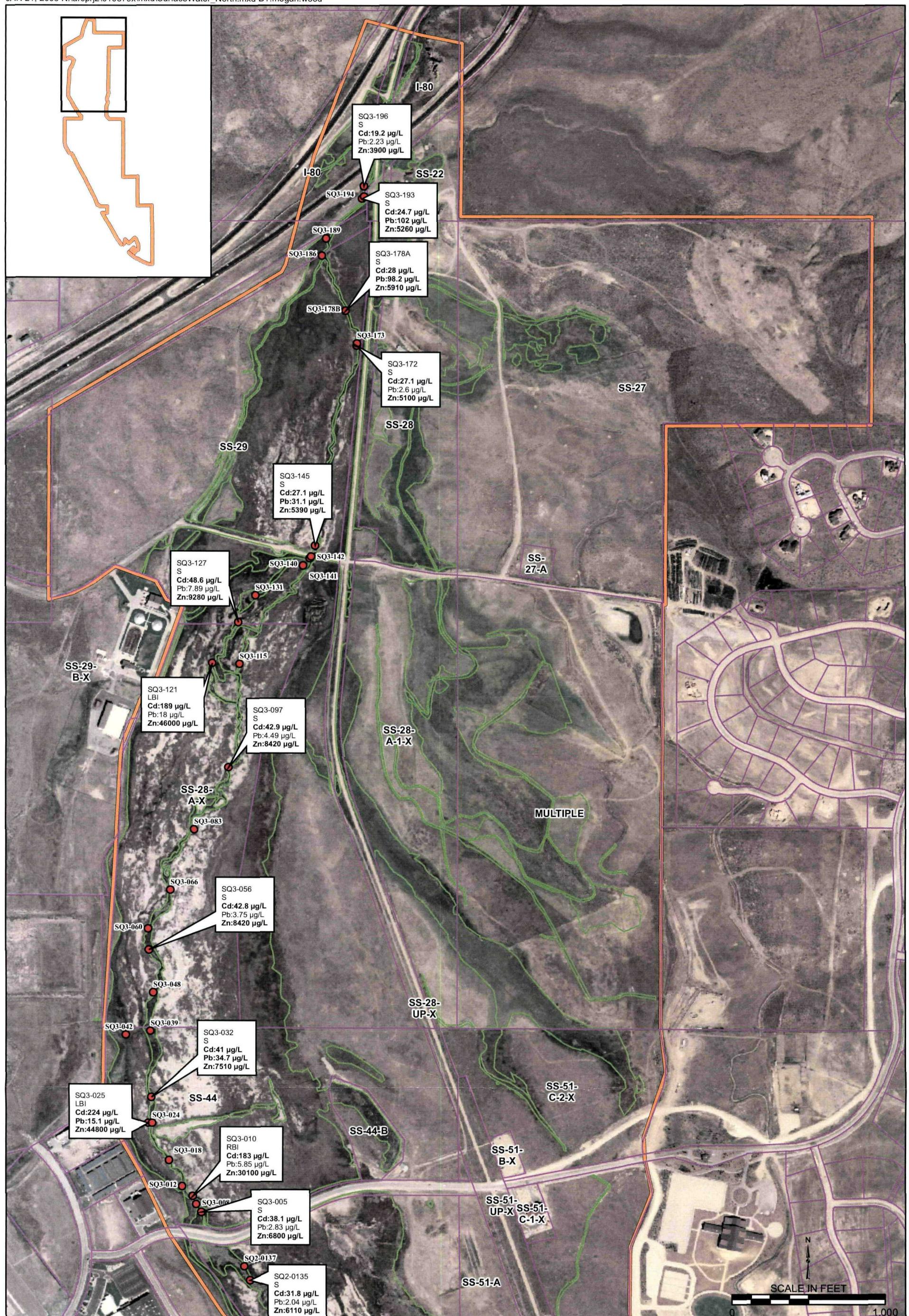
- ▲ Phase I Groundwater Sample Locations
- Phase II Groundwater Sample Locations
- Study Boundary
- Parcel Boundaries
- Wetlands Delineation



SCALE IN FEET

0 1,000

**GROUNDWATER SAMPLING RESULTS  
SILVER CREEK 010379X**



Note: 1) Data presented in figure represents dissolved metals concentrations for selected representative values. Data obtained from the April, 2004 USGS Report:

Principal Locations of Metal Loading from Floodplain Tailings, Lower Silver Creek, Utah.

2) Bold values represent values above the Chronic Water Quality Standard Targets for Aquatic Wildlife for Cadmium, Lead, and Zinc (adjusted for a hardness of 400 mg/L) defined by the Utah Administrative Code Rule R317-2 - Standards of Quality for Waters of the State, Tables 2.14.2 and 2.14.3a, UDEQ-DWQ, 2008.

JAN 21, 2008

**FIGURE 4A****Legend**

- Surface Water Samples

- Study Boundary

- Parcel Boundaries

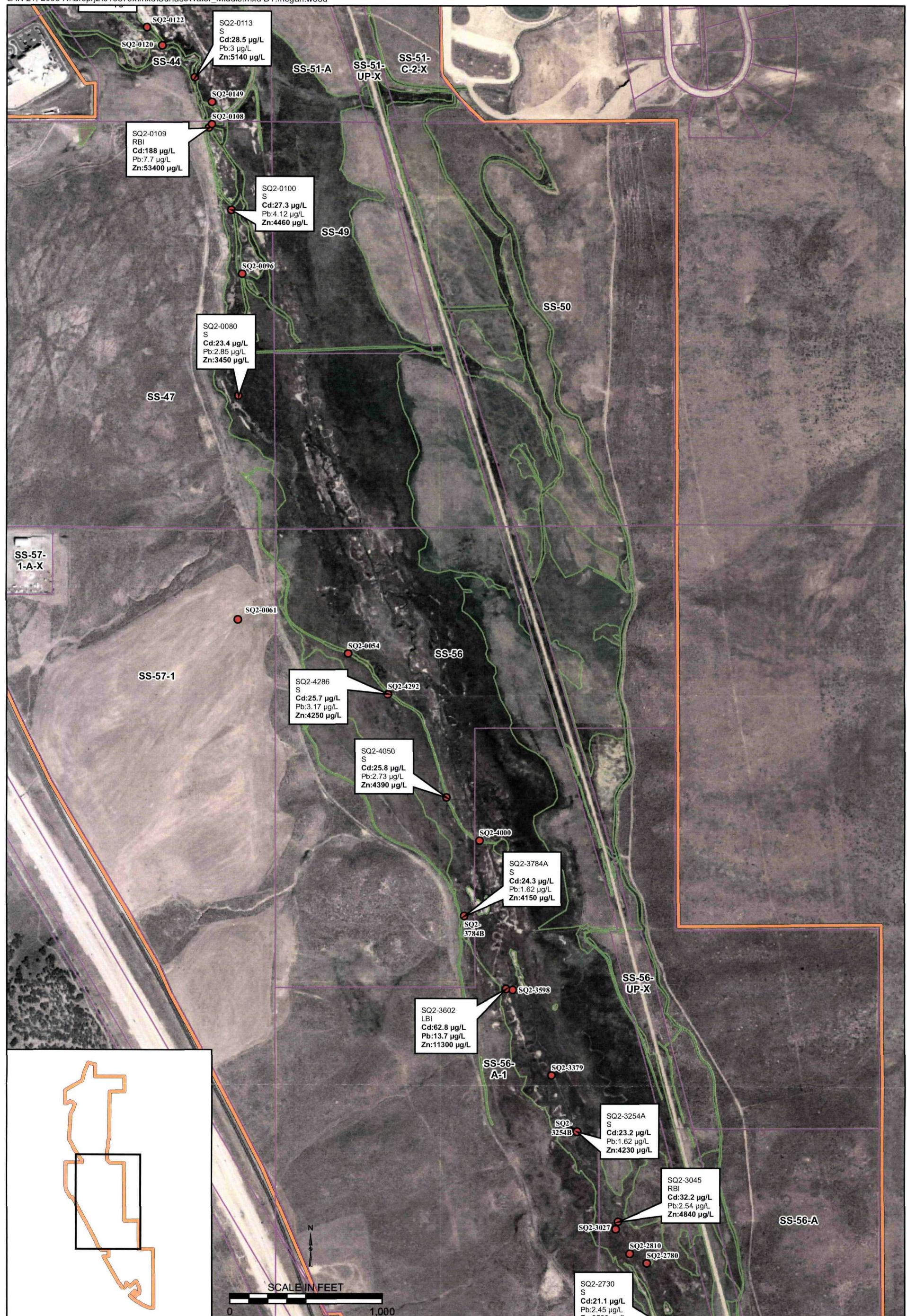
- Wetlands Delineation

S = Stream

RBI = Right Bank Inflow

LBI = Left Bank Inflow

**SURFACE WATER SAMPLING RESULTS  
SILVER CREEK 010379X**



Note: 1) Data presented in figure represents dissolved metals concentrations for selected representative values. Data obtained from the April, 2004 USGS Report.

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JAN 21 2008

JAN 21, 2008

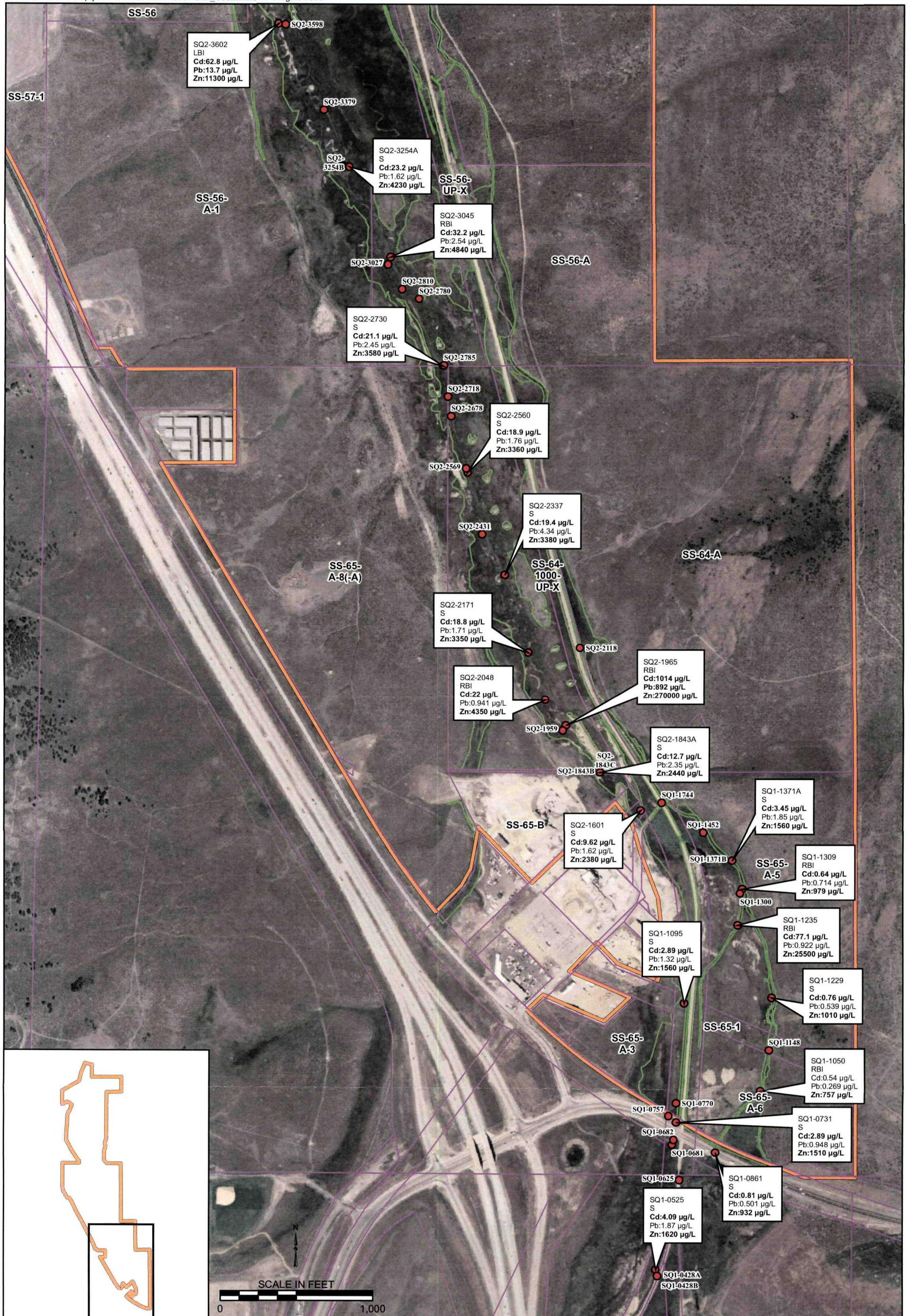


### **Legend**

- Legend**

  - Surface Water Samples
  - Study Boundary
  - Parcel Boundaries
  - Wetlands Delineation
  - S = Stream
  - RBI = Right Bank Inflow
  - LBI = Left Bank Inflow

**SURFACE WATER SAMPLING RESULTS**  
**SILVER CREEK 010379X**



Note: 1) Data presented in figure represents dissolved metals concentrations. Data obtained from the April, 2004 USGS Report: Principal Locations of Metal Loading from Foodplain Tailings, Lower Silver Creek, Utah.  
2) Bold values represent values above the Chronic Water Quality Standard Targets for Aquatic Wildlife for Cadmium, Lead, and Zinc (adjusted for a hardness of 400 mg/L) defined by the Utah Administrative Code Rule R317-2 - Standards of Quality for Waters of the State, Tables 2.14.2 and 2.14.3a, UDEQ-DWQ, 2008.

JAN 21, 2008

FIGURE 4C



## Legend

- Surface Water Samples
  - Study Boundary
  - Parcel Boundaries
  - Wetlands Delineation

S = Stream  
RBI = Right Bank Inflow  
LBI = Left Bank Inflow

**SURFACE WATER SAMPLING RESULTS**  
**SILVER CREEK 010379X**

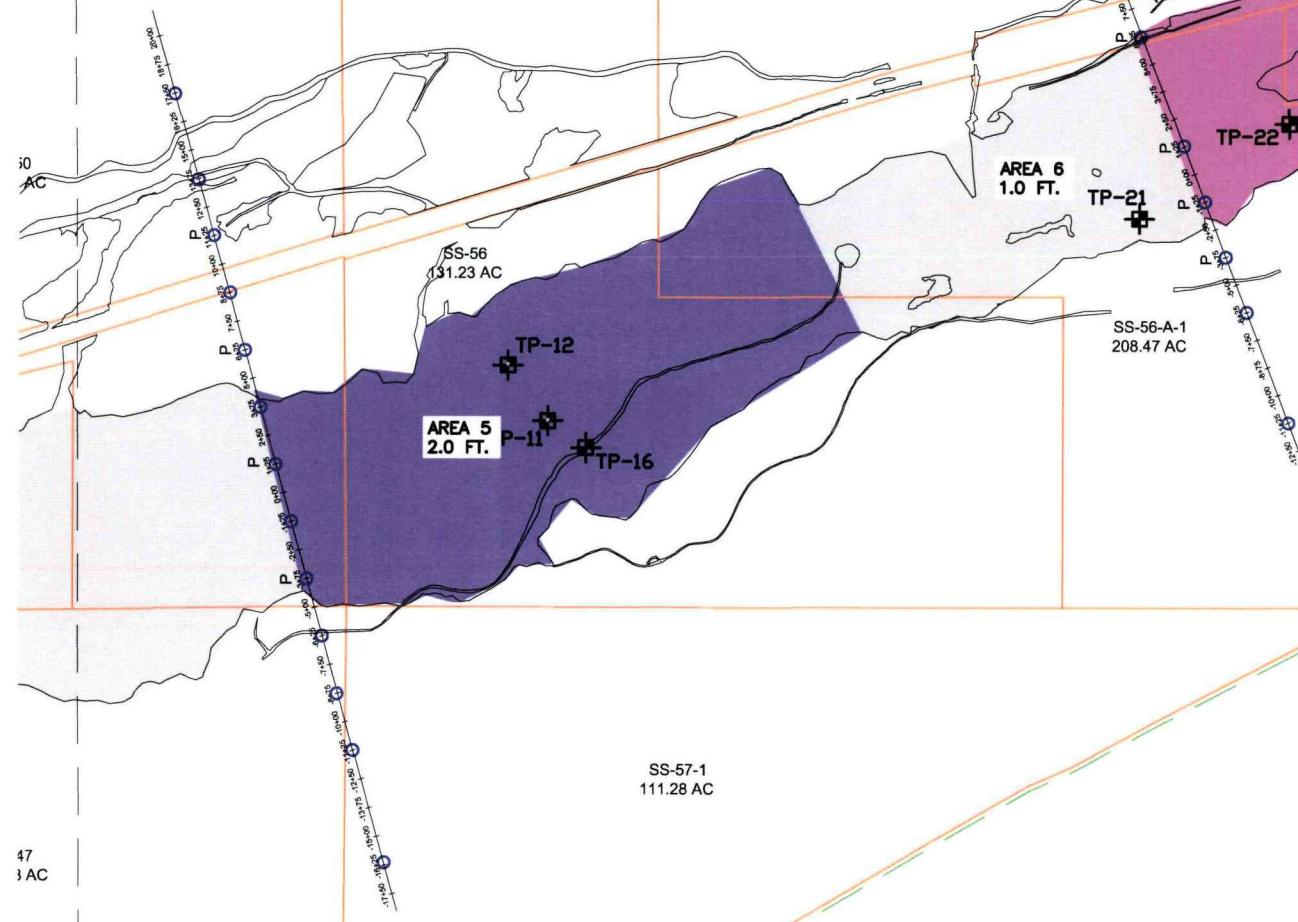
MATCH LINE

Description	Area (sf)	Area (ac)	Est. Tailings	
			Depth (ft)	Est. Volume (cy)
AREA 1	1,566,621	36.0	5.0	291,000
AREA 2	4,832,090	110.9	3.0	537,000
AREA 3	1,628,121	37.4	2.0	121,000
AREA 4	2,490,887	57.2	1.0	93,000
AREA 5	2,350,619	54.0	2.0	175,000
AREA 6	1,146,475	26.3	1.0	43,000
AREA 7	1,322,818	30.4	0.5	25,000
AREA 8	1,307,120	30.0	4.0	194,000
<b>TOTAL:</b>	<b>382.1</b>			<b>1,479,000</b>

Testpit ID	Tailings (Depth BGS)	Black Organic Clay Layer (Depth BGS).	
		TP-11	TP-12
TP-11	0 - 2	N/A	
TP-12	0 - 2	2 - 2.5	
TP-13	N/A	0 - 1	
TP-14	N/A	0.5 - 1.5	
TP-15	N/A	N/A	
TP-16	0 - 2	2 - 3	
TP-21	0 - 1	1 - 3.5	
TP-22	0 - 0.5	0.5 - 1	

BGS: Below Ground Surface

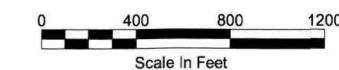
3



D:\010370\FIGURE SA-SLDNG.SOUTH 1\2008\5034 PM\_JIM KENHOLZ

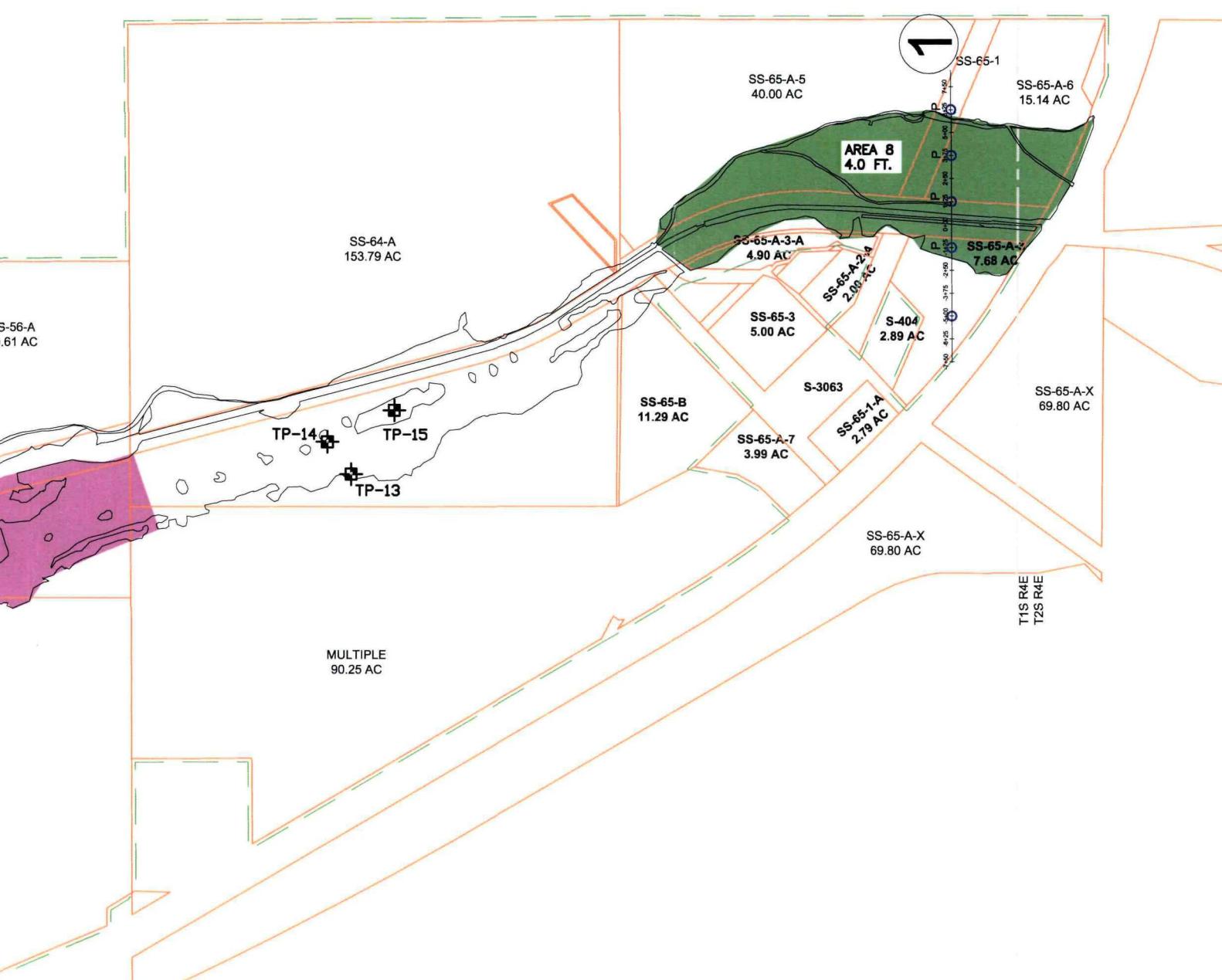
47

3 AC



2

PHASE I  
TRANSECT  
LOCATION



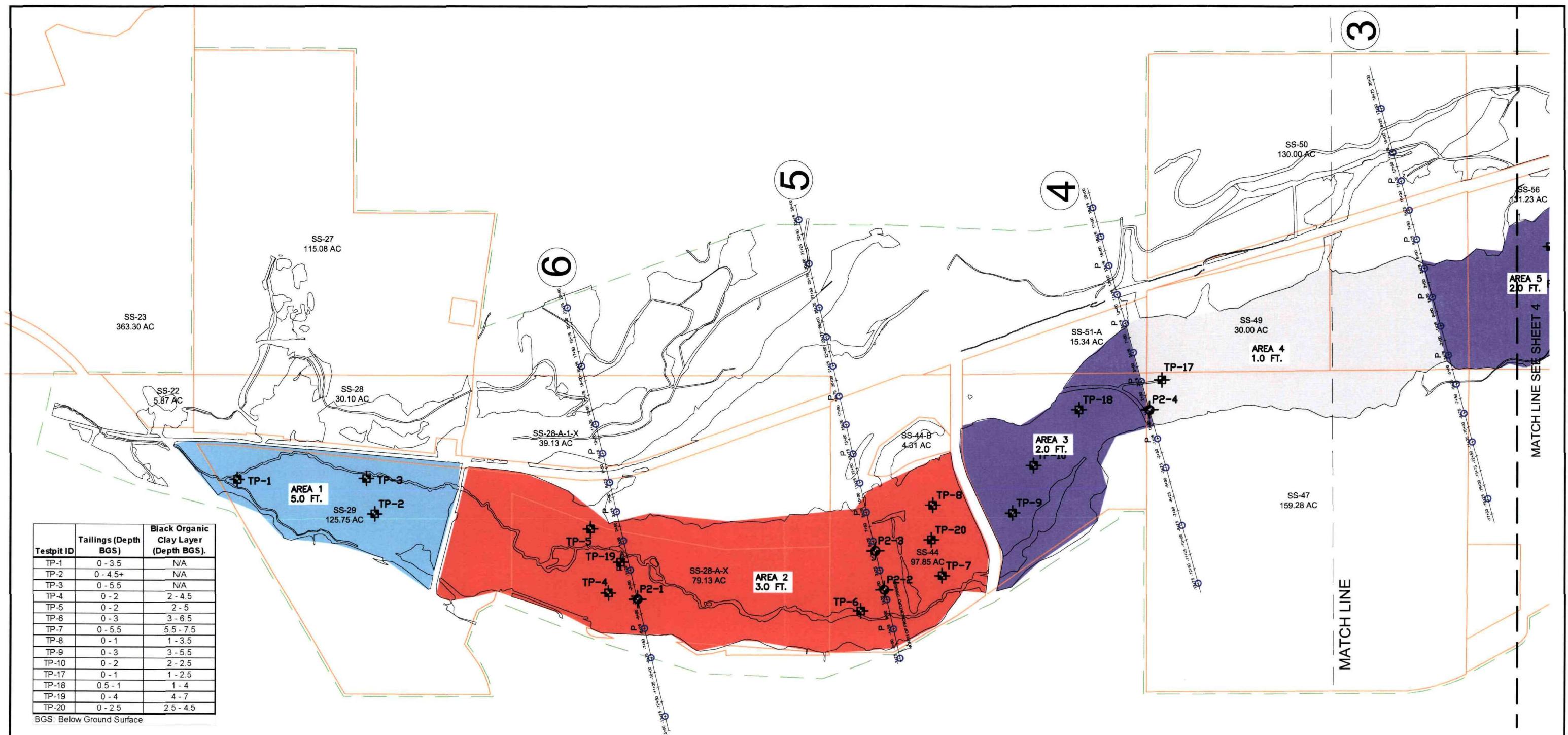
LEGEND

- PARCEL BOUNDARY
- AREA OF HIGH WETLANDS POTENTIAL
- STREAMS AND DITCHES
- EXISTING FENCE
- SITE BOUNDARY
- SECTION LINE

- PHASE I SAMPLE LOCATION
- PHASE I PIEZOMETER/BORING LOCATION
- PHASE II TESTPIT LOCATION
- PHASE II PIEZOMETER LOCATION

NO.	REVISIONS DESCRIPTION	DATE	BY	LWR SILVER CR LOAD REDUCTION ALTERNATIVES		
				PRELIMINARY TAILINGS VOLUME ESTIMATE		
				<b>TETRA TECH</b> 1900 S. SUNSET ST., SUITE 1-F, LONGMONT, CO 80501 TEL: 303.772.5292 FAX: 303.772.7039		
DESIGNED BY: BS	APPROVED BY: BM	JOB NO.	SHEET:			
DRAWN BY: KW	DATE: 6/19/2007	19.3924.008.00				
CHECKED BY: BS	SCALE: AS NOTED					

FIG. 5A

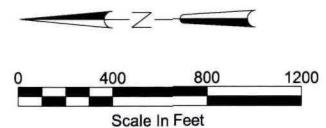


#### LEGEND

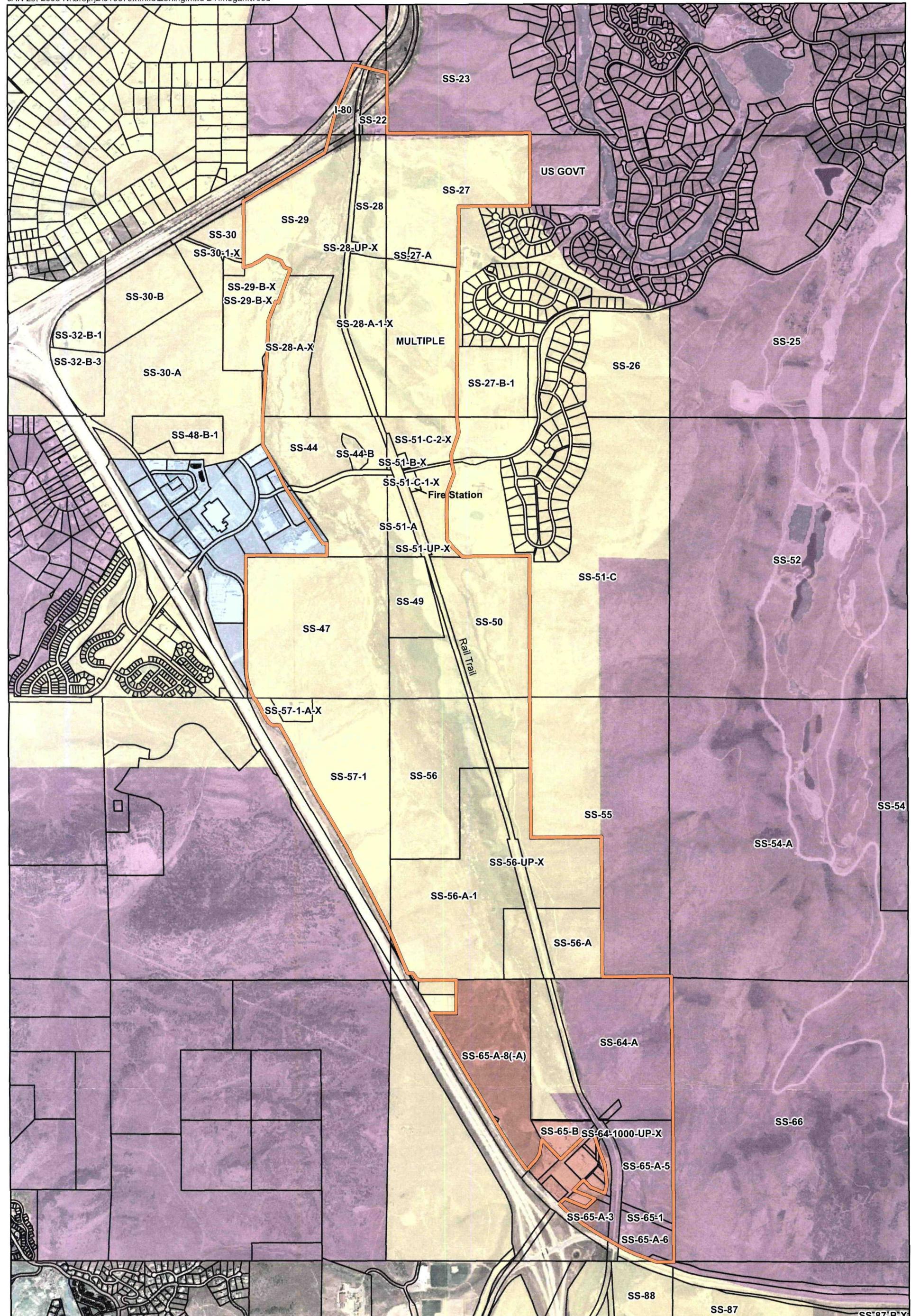
- PARCEL BOUNDARY
- AREA OF HIGH WETLANDS
- POTENTIAL STREAMS AND DITCHES
- EXISTING FENCE
- SITE BOUNDARY
- SECTION LINE
- PHASE I SAMPLE LOCATION
- PHASE I PIEZOMETER/BORING LOCATION
- PHASE II TESTPIT LOCATION
- PHASE II PIEZOMETER LOCATION

- TAILINGS DEPTH = ~0.5 FT.
- TAILINGS DEPTH = ~1.0 FT.
- TAILINGS DEPTH = ~2.0 FT.
- TAILINGS DEPTH = ~3.0 FT.
- TAILINGS DEPTH = ~4.0 FT.
- TAILINGS DEPTH = ~5.0 FT.

Description	Area (sf)	Area (ac)	Est. Depth (ft)	Est. Volume (cy)
AREA 1	1,566,621	36.0	5.0	291,000
AREA 2	4,832,090	110.9	3.0	537,000
AREA 3	1,628,121	37.4	2.0	121,000
AREA 4	2,490,887	57.2	1.0	93,000
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AREA 8	1,307,120	30.0	4.0	194,000
<b>TOTAL:</b>	<b>382.1</b>			<b>1,479,000</b>



NO.	REVISIONS DESCRIPTION	DATE	BY	LWR SILVER CR LOAD REDUCTION ALTERNATIVES
				PRELIMINARY TAILINGS VOLUME ESTIMATE
				<b>TETRA TECH</b> 1900 S. SUNSET ST., SUITE 1-F, LONGMONT, CO 80501 TEL 303.772.5282 FAX 303.772.7039
DESIGNED BY: BS	APPROVED BY: BM	JOB NO.	SCALE:	FIG. 5B
DRAWN BY: KW	DATE: 4/12/2007		AS NOTED	
CHECKED BY: BS				

**Legend**

Snyderville Zoning

Community Commercial (CC)

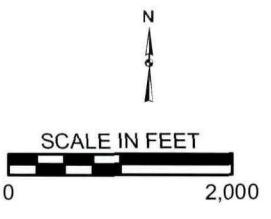
Hillside Stewardship (HS)

Rural Residential (RR)

Service Commercial (SC)

Study Area Boundary

Parcel Boundaries



JAN 29, 2008

**FIGURE 6**

**ZONING MAP**  
**LOWER SILVER CREEK**